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National Defense University
1983-1984 Catalogue

NATIONAL DEFENSE UNIVERSITY
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Washington, D.C. 20319
Telephone, (202) 693-1076 or (AV) 223-1076

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National Defense University
1983-1984 Catalogue

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THE PRESIDENT'S MESSAGE

Based on its mission the first goal of the National Defense University is to ensure excellence in both professional military education and research on defense matters. Further goals are to make the University a principal repository of expertise on strategy and mobilization and to instill in our graduates a joint perspective on matters of national security. Ultimately, we hope to establish the University as a vital national asset because of our close attention to areas that are increasingly relevant to our current and emerging needs.

To achieve these goals we are guided by an educational philosophy that embodies a commitment to excellence in the study and research of national security with increased emphasis on joint and combined military operations. This commitment is being fulfilled through a program of study, research, and professional activities that emphasizes relevance, intellectual rigor, creativity, and expanded involvement in the learning process.

A nation that forgets how to fight yesterday's war may be doomed to repeat it; one that neglects to learn how to fight tomorrow's war may be doomed to lose it. At the University, the relevance this imposes keeps our primary focus of education and research on interagency, joint, and combined-forces matters. And while the National War College still focuses principally on national security policy, today it gives new attention to joint and combined-force strategies, to doctrine and operations at theater and global levels, and to the broader art of war. The Industrial College now looks more intently to excellence in mobilizing industrial preparedness and to deployment planning, adding thus to its major emphasis on defense economics and management. The Armed Forces Staff College currently spotlights professional development more brightly, along with its traditional focus on joint planning. Relevance further requires that curricula and research reflect the major concerns of the National Security Council, the Joint Chiefs of Staff, and the Commanders of the Unified Commands. Finally, relevance demands that the three NDU Research Centers operate in a closely symbiotic relationship with the three colleges.

Intellectual rigor means a more demanding academic program with significant research activity in all components of the University. Intellectual rigor requires that students explore issues in depth. It emphasizes the development of each student's analytical capabilities, and it requires a series of short but demanding writing exercises. An assessment and evaluation system provides feedback to each student to enhance his or her professional growth.

Creativity at the University provides the intellectual yeast to promote innovative solutions to new and enduring problems. Creativity means encouraging students to push beyond derivative thinking. It means more emphasis on innovation in all aspects of the University's academic program, and it is promoted by four highly successful and intellectually demanding elective courses in creativity. Courses on military strategy and operations now lay more stress on creativity. Moreover, senior university leaders are giving their personal support for and involvement with initiatives designed to foster a more creative, innovative spirit among our students and faculty.

Expanded student involvement in the learning process means increasing emphasis on active learning methodologies. It requires much greater attention to problem solving in the joint arena through student research programs, simulations, and exercises.

For the academic year 1983-1984 we expect to place even greater emphasis on joint and combined perspectives. This will be complemented by enhanced student and faculty participation in all aspects of defense planning. Such a learning experience will reinforce current curriculum goals and help provide an even deeper and broader understanding of planning to prepare for war and execute these plans if the Nation is attacked.

I am convinced that this planning goal, as well as our overall educational and research mission, can be better accomplished by greatly strengthening student and faculty comprehension of the capability and value of computer technology. This in turn will enhance each student's effectiveness in evaluating problems and making correct and timely decisions throughout his or her professional career. As a part of this learning outcome we will also, beginning in the current academic year, focus on the relationship between the evolving military information and decision technologies of the 1980s and 1990s and on command and mission responsibilities, such as C^3I, and joint planning and logistics. This enhanced computer technology capability will also benefit each NDU element.

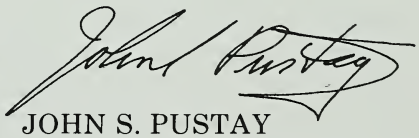
Our three Research Centers are now fully operational: the Strategic Concepts Development Center, stressing studies in concepts for warfighting at the theater and global levels of conflict and in doctrine for the employment of joint and combined forces; the Mobilization Concepts Development Center, emphasizing studies in industrial preparedness, military mobilization, and deployment planning; and the War Gaming and Simulation Center, intensifying the use of simulations and gaming to support educational and research objectives. We created two new student faculty research programs: The Strategic Studies Program at the War College and the Mobilization Studies Program at the Industrial College.

Also, we are stressing a further exchange among all NDU components concerning educational and research programs and other joint activities. This includes greater cooperation between NDU and component operational and support personnel. In the long term, cooperative efforts will be key to strengthening the University concept and thereby helping in an essential way to build an even stronger University, while preserving the special identities and rich traditions of the National War College, the Industrial College of the Armed Forces, and the Armed Forces Staff College.

On 1 October 1982 the University assimilated the Department of Defense Computer Institute, which will further enhance our computer technology and our simulations and war-gaming capability. We inaugurated the Institute of Higher Defense Studies, which initiated a course for newly appointed flag and general officers and ambassadors. We saw the establishment of a privately chartered NDU Foundation, composed of friends of the University. We are instituting an NDU journal which will provide a vehicle for the stimulation of new ideas and the articulation of innovative views in the whole area of interagency, joint, and combined forces strategy and operations. Finally, while we will continue to take into account the evolving professional needs of the 1980s and 1990s, and I have identified some areas of further emphasis for the academic year, our principal thrust will be upon consolidation and continued progress with the initiatives underway.

We have come a long way, building on the excellent work of our predecessors. I look forward to meeting the members of this year's class and helping you fulfill the challenges that lie ahead.

Sincerely,



JOHN S. PUSTAY
Lieutenant General, USAF
President

CONTENTS

	PAGE
NATIONAL DEFENSE UNIVERSITY	
HISTORY	7
THE DIRECTORATES AND STAFF	
Office of the President	11
Decision Systems Directorate	13
Extension Programs Directorate	15
Research Directorate	19
Resources Management Directorate	23
THE COLLEGES	
Industrial College of the Armed Forces	27
National War College	29
Armed Forces Staff College	31
THE CENTERS	
Mobilization Concepts Development Center	34
Strategic Concepts Development Center	36
War Gaming and Simulation Center	39
THE INSTITUTES	
Department of Defense Computer Institute	43
Institute of Higher Defense Studies	45
UNIVERSITY LIBRARY	46
BOARD OF VISITORS	49
THE NDU FOUNDATION	50
INDUSTRIAL COLLEGE OF THE ARMED FORCES	
CURRICULUM	53
Core Program	55
Electives Program	59
Research Program	60
STAFF AND FACULTY	61

PAGE

NATIONAL WAR COLLEGE

CURRICULUM 67
Core Program 67
Electives Program 70
Research Program 71

STAFF AND FACULTY 72

ARMED FORCES STAFF COLLEGE

THE JOINT AND COMBINED STAFF OFFICERS COURSE 77

THE JOINT COMMAND, CONTROL, AND COMMUNICATIONS STAFF AND OPERATIONS COURSE 81

THE JOINT ELECTRONIC WARFARE STAFF OFFICER COURSE 81

OTHER COURSES 83

STAFF AND FACULTY 84

ANNEX—POLICIES AND PROGRAMS

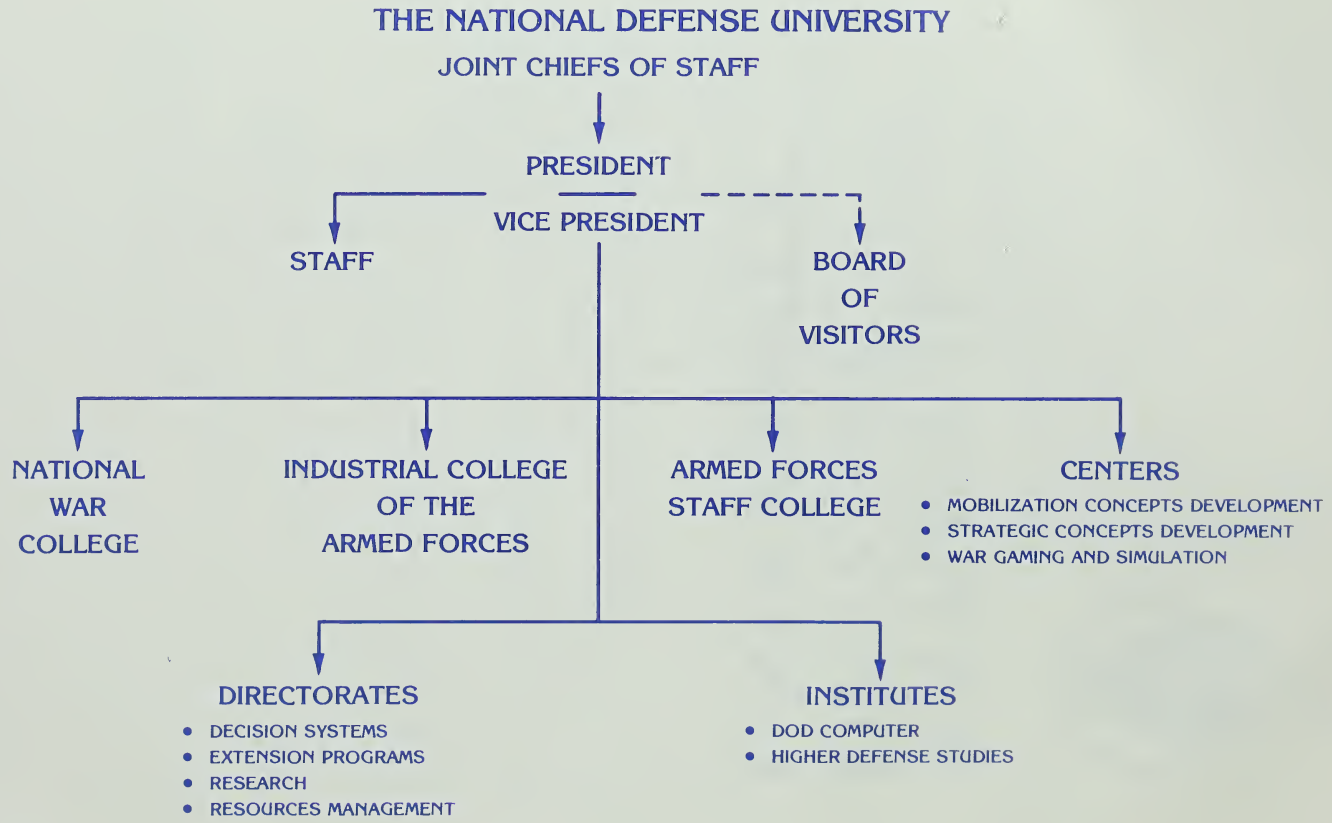
A. UNIVERSITY POLICIES 92

B. FORT McNAIR, WASHINGTON, D.C., CAMPUS 96
Elective Courses
National Defense University 97
Industrial College of the Armed Forces 103
National War College 113

C. NORFOLK, VIRGINIA CAMPUS 121
Elective Courses 122
Armed Forces Staff College

CALENDAR OF EVENTS 126

NATIONAL DEFENSE UNIVERSITY


THE NATIONAL DEFENSE UNIVERSITY
JOINT CHIEFS OF STAFF
PRESIDENT
VICE PRESIDENT
STAFF
BOARD OF VISITORS
NATIONAL WAR COLLEGE
INDUSTRIAL COLLEGE OF THE ARMED FORCES
ARMED FORCES STAFF COLLEGE
CENTERS
• MOBILIZATION CONCEPTS DEVELOPMENT
• STRATEGIC CONCEPTS DEVELOPMENT
• WAR GAMING AND SIMULATION
DIRECTORATES
• DECISION SYSTEMS
• EXTENSION PROGRAMS
• RESEARCH
• RESOURCES MANAGEMENT
INSTITUTES
• DOD COMPUTER
• HIGHER DEFENSE STUDIES

MISSION

The mission of the National Defense University is to ensure excellence in professional military education and research in the essential elements of national security.

Specifically, the National Defense University is tasked to:

— Prepare selected commissioned officers and civilian officials from the Department of Defense, Department of State, and other agencies of government for command, management, and staff responsibilities in a multinational, intergovernmental, or joint national security setting. The curricula of the two senior colleges emphasize national security policy formulation, military strategy development, mobilization, management of resources for national security, and planning for joint and combined operations. The Armed Forces Staff College curriculum is designed to prepare officers for joint and combined staff duty. In addition to mission-specific education the colleges emphasize developing executive skills and improving competencies.

— Ensure continuing excellence in professional military education in the field of national security by providing a range of short programs, including correspondence courses, focusing on joint matters for study by selected commissioned officers and government officials from all Services, selected agencies of the U.S. Government, and friendly nations.

— Promote excellence in information resources management (IRM) education for senior and intermediate level executive users of information systems.

— Provide through two research centers and the War Gaming and Simulation Center a resource of expertise for the benefit of the Secretary of Defense, the Joint Chiefs of Staff, the component colleges of the National Defense University, and other Federal departments and agencies involved in national security.

— Conduct short-range and long-range studies of national security policy, military strategy, the allocation and

management of resources for national security, and civil-military affairs. Associated research is centered on college missions and is relevant to JCS and OSD study requirements. A major goal of University research is to create a national repository of expertise on mobilization, military strategy, and joint/combined operations subjects.

Promote understanding and teamwork among the Armed Forces and between them and those agencies of the Government and industry that contribute to national security.

ORGANIZATION

The President of the University is a lieutenant general or vice admiral chosen on a rotating basis from one of the military departments; the Vice President is a senior Foreign Service Officer appointed by the Department of State. There are four directors who report to the President and who provide academic and logistic support to the colleges: Decision Systems, Extension Programs, Research, and Resources Management. The directors of the Strategic Concepts Development Center, Mobilization Concepts Development Center, War Gaming and Simulation Center, Institute for Higher Defense Studies, and the Department of Defense Computer Institute also report directly to the President. The President's office consists of an Executive Officer, an Assistant to the President, the special assistants of the President's Planning Group, a Public Affairs Officer, and an Executive Development Office.

The President's staff includes professionals with a combination of educational and military experience that enables them to assess ongoing academic programs, to interact with key Joint Chiefs of Staff and Department of Defense officials, to maintain liaison with the Service headquarters and other government agencies' staffs, and to work closely with civilian academic institutions.

The college commandants report directly to the University President who provides them with policy guidance and direction. The commandants have principal responsibility

for curriculum development, student activities, faculty management, and other matters of internal administration. College organization is more fully described in later sections.

The college faculties represent a wide range of disciplines and combine the diversified experience and technical expertise of the military profession with the disciplinary training and specialization of civilian education. More than half of the faculty members are military officers, divided almost equally among the Services. Their credentials reflect specialties relevant to the curricula of the colleges and they have outstanding records and requisite graduate education. The military faculty represents considerable military service in both operational and staff assignments. Some civilian faculty members are senior officials on loan from parent agencies, such as the State Department and U.S. Information Agency. Others are eminently qualified professors recruited from the academic community. Together they represent a rich and varied experience which reflects a distinguished background in the Nation's service and outstanding academic credentials.

Lowell Bruce Laingen
Ambassador, Department of State
Vice President, National Defense University

President Theodore Roosevelt delivering the address at the laying of the cornerstone of the building which now bears his name

HISTORY

For most of our national lifetime, American scholarship in the profession of arms matured in each of our military forces more or less independently. Requirements for advanced studies for leaders of the Nation's land, sea, and air defense were met as they arose, and with distinction, by postgraduate colleges set up by and for the respective Services.

But twentieth-century technology's acceleration has imposed a growing need for interdependence: for closer ties among the Western allies, between America'a own armed Services and the industrial plant that arms them, and particularly among our military centers of higher learning and research.

This prompted the Joint Chiefs of Staff in 1976 to inaugurate the National Defense University (NDU), an historic pooling of our defense community's intellectual resources. At first made up of the National War College (NWC) and the Industrial College of the Armed Forces (ICAF), the University was joined in 1981 by the Armed Forces Staff College (AFSC), and a year later by the Department of Defense Computer Institute (DODCI). The NDU charter provides that a Foreign Service Officer of ambassadorial rank is Vice President of the University.

The colleges' support facilities were organized into four University directorates. Eliminating overlap therein freed resources, enabling the University to enroll more students without additional cost. The University has doubled its elective courses, upgraded its faculty's credentials, added an Executive Development Office, and expanded its research programs. As part of its expanding mission the University has also created three new research centers and the Institute of Higher Defense Studies.

The National War College brought to the union in 1976 more than three decades of experience in training Army and Navy officers to work closely together. The Industrial College contributed expertise in total national industrial and economic mobilization, and the Armed Forces Staff College brought 35 years of training officers of all Services for joint and combined staff duties.

The University's most venerable precursor, the Army War College, was founded in 1903. Although it had exchanged a few student officers with the Navy War College, founded in 1884, it was not until World War II that a true multi-Service institution emerged. This was the Army-Navy Staff College (ANSCOL), which began in 1943 to "train officers of the arms in . . . duties in unified and coordinated Army and Navy Commands." In 1946 came creation of the National War College, an ANSCOL institutional successor.

Then as now, NWC students pursued their year's work at Washington's Fort McNair in the splendid domed brick Theodore Roosevelt Hall, first occupied in 1907 by the Army War College and now designated a national historical landmark. Its neighbor to the northeast is Dwight D. Eisenhower Hall, home of the Industrial College.

World War I's lessons led to steps in 1920 to train military officers in the intricacies of industry's mobilization for modern war. After guidance from statesman-industrialist Bernard M. Baruch, the Army Industrial College opened its makeshift doors in 1924. Thereafter, its curriculum kept pace with technology's expansion and prepared the Nation's military-industrial partnership for the supreme tests of World War II.

Shortly after classwork that was suspended during the war was resumed in January 1946, the college became the Industrial College of the Armed Forces, with sharper inter-Service focus. When the Industrial College moved from temporary quarters to Fort Lesley J. McNair in 1960, its new home was dedicated on 6 September by President Dwight D. Eisenhower, a graduate of the Class of 1933. Since that time, the college has added pioneering studies in emergency preparedness planning to its instruction in mobilization resource management.

Like the National War College, the Armed Forces Staff College also claims the Army-Navy Staff College as its predecessor. World War II demonstrated that mastery of joint and combined operations is a must of present-day warfare, and thus the Joint Chiefs of Staff established the Armed Forces Staff College on 24 June 1946 with this training mission. Under the Chief of Naval Operations, it set to work

in its present location in Norfolk, Virginia, on 13 August of the same year.

Since then, the college has graduated two classes each year, with the staff, faculty, and students assigned by each Service to provide a joint atmosphere. With the construction of Normandy Hall in 1962, the college completed its transition from temporary to permanent institution and joined the National Defense University on 12 August 1981.

President Gerald R. Ford Dedicating National Defense University
18 January 1977

THE PRESIDENT'S OFFICE

The President's Office, described more fully in the NDU organization section, is a small staff of professionals coordinating activities of the colleges, centers, institutes, and other elements of the University. In addition, the office maintains liaison with key government and educational officials and oversees such university functions as public affairs, health and fitness, and executive development.

OFFICE OF THE PRESIDENT

JOHN S. PUSTAY, Lieutenant General, USAF, President, NDU
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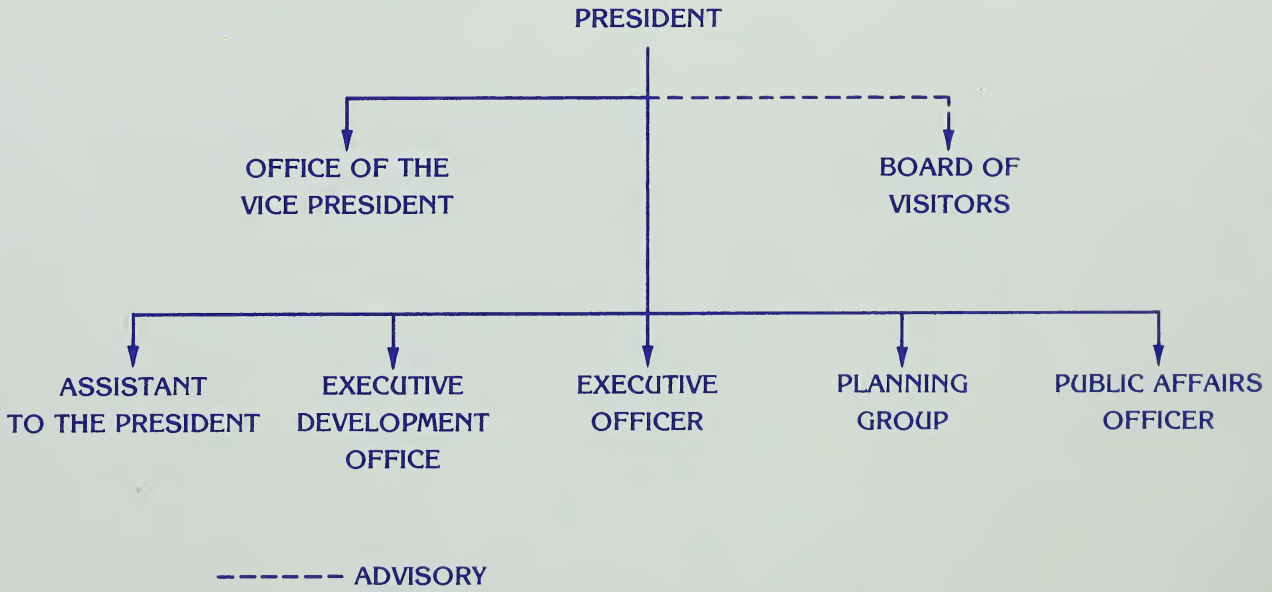
OFFICE OF THE PRESIDENT



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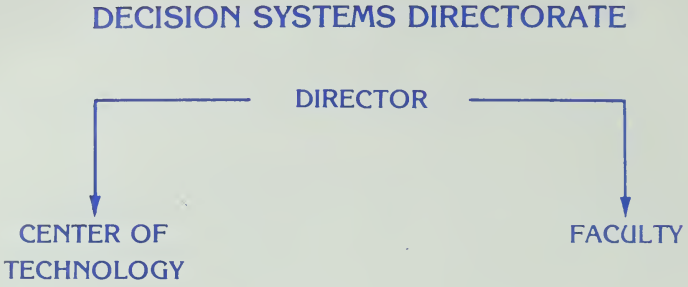
DECISION SYSTEMS DIRECTORATE

The academic mission of the Decision Systems Directorate is to provide quantitative instruction, computer support, and systems analysis expertise to the National Defense University. The directorate designs and conducts foundation courses in quantitative methods and automatic data processing, and offers a series of advanced electives in systems analysis and decision aids for national security policy formulation. These courses, for students of both of the senior colleges, provide instruction in the uses and limitations of quantitative approaches, statistical tools, and the range of techniques and applications currently in use in the defense and other government sectors.

The directorate provides increasingly extensive simulation and gaming support to both senior colleges and the Armed Forces Staff College. It also manages computer simulation and gaming exercises which provide the students experiences in areas such as the weapons systems acquisition process, force planning and budgeting, manpower mobilization, and global and theater war games.

The staff additionally offers in-house consulting in quantitative analysis and decision support systems to NDU students, faculty, and staff, and furnishes computer system support for administrative requirements.



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EXTENSION PROGRAMS DIRECTORATE

The Extension Programs Directorate provides educational opportunities for the nonresident defense community through a correspondence course, off-campus seminars, and regional symposia. It produces the National Security Management Course and administers the course both by correspondence and in seminars for senior Regular, Reserve, and National Guard officers on active or inactive duty, as well as U.S. Government officials, eligible civilians, and selected foreign military officers.

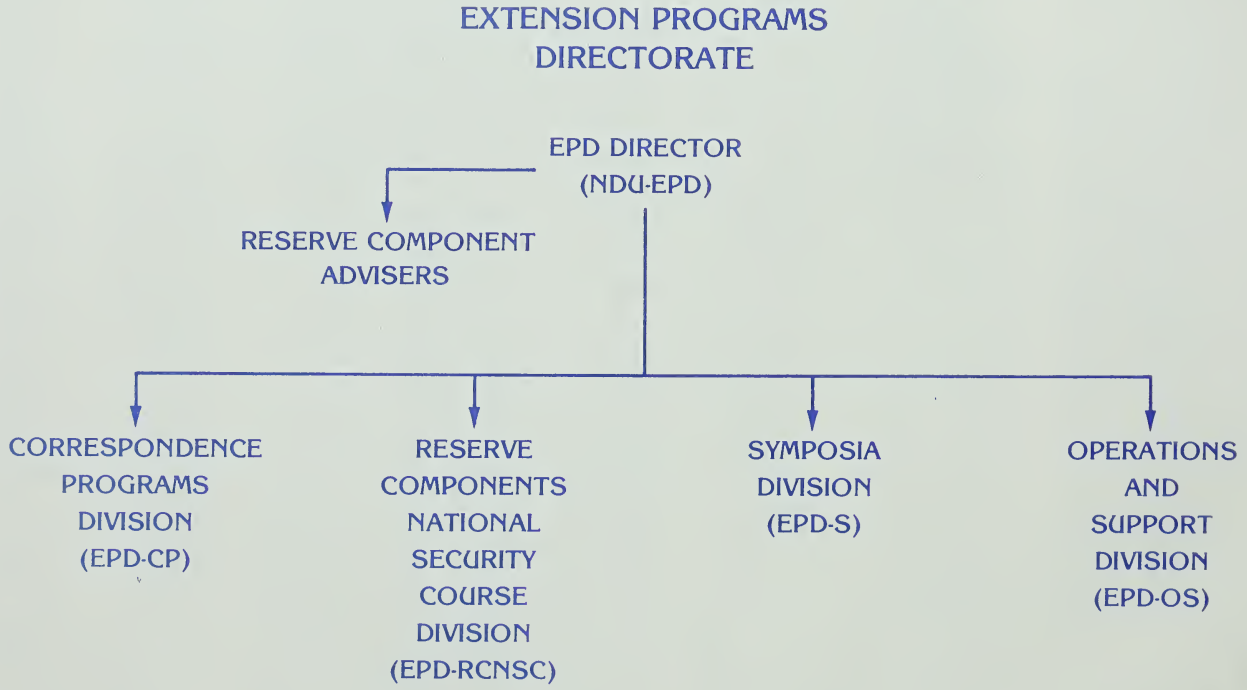
Material for the correspondence program reflects the curricula of both the Industrial College and the National War College and provides a broad understanding of national security policy formulation, strategy, mobilization, and the management of national resources. Authors in the directorate or competent outside experts prepare textbooks and other instructional materials while editors assure consistency of style and relevance of content. The division establishes student criteria, prepares examinations, and counsels students.

The Operations and Support Division screens and enrolls applicants, ships instructional materials, responds to inquiries, records evaluation scores, and awards diplomas.

Extension Programs officers direct a two-week Reserve Component National Security Course three times a year at sites throughout the country, as nominated by the Services. Faculty from the National War College and the Industrial College of the Armed Forces furnish lectures, issues, examinations, and panels consistent with course objectives. Each course has a capacity of 200-300 officers, made up of senior Reserve component officers (ranks 05-08) selected by all of the Services.

Reserve Advisers from the Army, Navy, and Air Force furnish counsel and information on Reserve component matters to the President, Commandants, faculty, and students.

The directorate also plans and conducts two symposia annually. The NATO Symposium draws together over 200


EXTENSION PROGRAMS
DIRECTORATE
EPD DIRECTOR
(NDU-EPD)
RESERVE COMPONENT
ADVISERS
CORRESPONDENCE
PROGRAMS
DIVISION
(EPD-CP)
RESERVE
COMPONENTS
NATIONAL
SECURITY
COURSE
DIVISION
(EPD-RCNSC)
SYMPOSIA
DIVISION
(EPD-S)
OPERATIONS
AND
SUPPORT
DIVISION
(EPD-OS)

participants from the Alliance senior military institutes, allied commands, U.S. Government agencies, diplomatic missions, NATO Defense College, and the National Defense University. Distinguished speakers discuss a theme of common interest; subtopics are then discussed in seminar format. The Pacific Symposium provides a forum for over 100 high-level representatives from Pacific nations to discuss candidly and openly their concerns about the changing strategic and economic environment in the Pacific and Indian Ocean area. Multiple topics, central to a theme, are presented by noted speakers and later discussed in organized panel sessions.

STAFF AND FACULTY

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Pacific Symposium, Arnold Auditorium

RESEARCH DIRECTORATE

The Research Directorate supports independent studies relating to national security policy formulation, national and military strategy, the allocation and management of resources for national security, and civil-military affairs. The directorate develops individual and group studies for consideration by decisionmakers at high levels of Government. It also directs research products toward a broader constituency through publication and distribution.

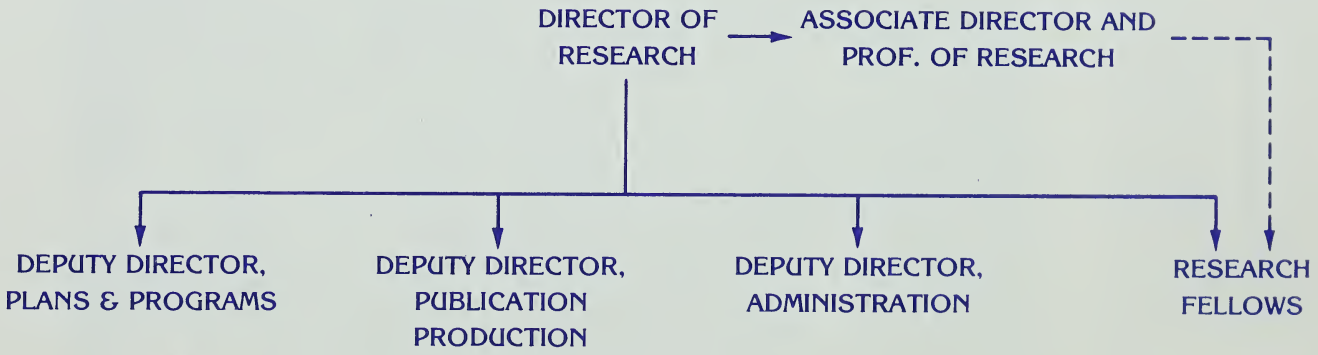
Researchers fall into several categories. Senior Fellows are selected military and government scholars who engage in full-time research, generally on a postdoctoral level. A few Associate Fellows are selected from the colleges' student bodies to pursue research as an alternative experience to portions of their curricula. International, Visiting, Faculty, and Adjunct Fellows undertake specialized research under NDU auspices.

The directorate's staff provides professional guidance in research, writing, and editing, as well as administrative and document processing support, in the preparation of manuscripts for publication and distribution.

The National Security Affairs Institute (NSAI), a collateral function of the Research Directorate, provides a forum in which national security policymakers can share in the perspectives of distinguished scholars, defense managers, business leaders, executive and legislative branch representatives, and other prominent citizens who articulate their views on security-related issues. Institute objectives include developing policy recommendations for presentation to defense executives and disseminating the participants' viewpoints to the community at large.

The institute conducts periodic conferences and seminars which address current national security affairs, culminating in the annual National Security Affairs Conference. Over the years, these meetings have focused the views of a broad spectrum of nationally prominent people on significant security issues.

RESEARCH DIRECTORATE



The NDU Press is the publication arm of the Research Directorate and the National Security Affairs Institute. The press publishes the products of individual research efforts as well as conference and seminar deliberations. These products include books, essays, reports, monographs, issue papers, and formal proceedings of NSAI conferences. The NDU Press also publishes studies in cooperation with commercial publishing houses.

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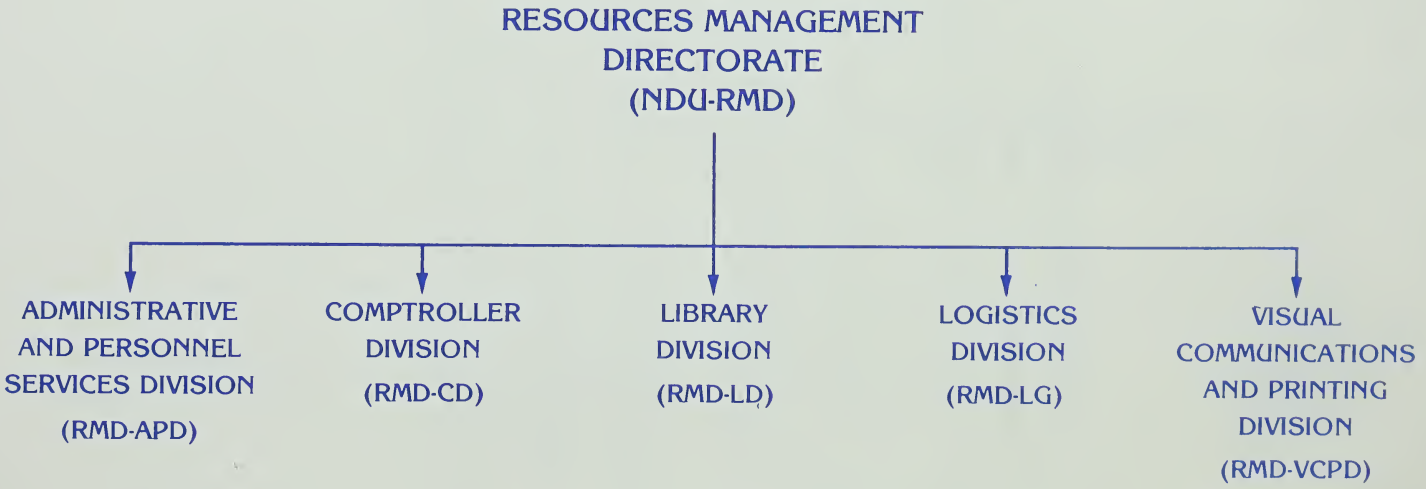
RESOURCES MANAGEMENT
DIRECTORATE
(NDU-RMD)
ADMINISTRATIVE AND PERSONNEL SERVICES DIVISION
(RMD-APD)
COMPTROLLER DIVISION
(RMD-CD)
LIBRARY DIVISION
(RMD-LD)
LOGISTICS DIVISION
(RMD-LG)
VISUAL COMMUNICATIONS AND PRINTING DIVISION
(RMD-VCPD)

RESOURCES MANAGEMENT DIRECTORATE

The mission of the Resources Management Directorate is to support the University in the areas of library services, logistics, general administrative and personnel requirements, budget, manpower management, travel, visual communications, and printing. This includes monitoring the accomplishment of functions performed by its five divisions: Library, Logistics, Administrative and Personnel Services, Comptroller, and Visual Communications and Printing.

The Library Division is responsible for assembling, organizing, preserving, and servicing an array of information resources in the fields of defense management, mobilization, national security policy formulation, and strategy sufficient to meet the needs of the faculty, staff, and students. The functions of the Library Division and its facilities are more fully described in a later section.

The Logistics Division is responsible for general facilities management, overall supply, and all procurement functions.

The Administrative and Personnel Services Division is responsible for providing those administrative and personnel functions not available within the colleges or other offices of the University.

The Comptroller Division is responsible for the overall management of the financial affairs of the University. The Program and Budget Branch oversees the development of budget estimates, and the administration and execution of the approved operating budgets of the colleges and research centers. The Management/Manpower Branch is responsible for the internal review program, manpower management, and joint manpower program requirements of the University. The Travel Services Branch coordinates travel and transportation requirements of University faculty, staff, and students including ticketing, passports, and visa requirements.

The Visual Communications and Printing Division is responsible for the preparation of all visual, graphic, and printed material in support of the University.

Color Guard

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Dwight D. Eisenhower Hall at Fort Lesley J. McNair

Ronald E. Narmi
Rear Admiral, USN
Commandant

INDUSTRIAL COLLEGE OF THE ARMED FORCES

The Commandant of the Industrial College of the Armed Forces is a general or flag officer. He is appointed by the Joint Chiefs of Staff, and he is responsible to the President, National Defense University. He is assisted by a senior Department of State officer as International Affairs Adviser, a military Dean of Students and Administration, and a military Dean of Faculty and Academic Programs.

The academic faculty and the administrative personnel supporting the Commandant and his assistants are from all the military Services. Service officers on the faculty are normally in the grades of colonel, captain, lieutenant colonel, or commander, and are specialists in their fields. The civilian faculty members include Department of the Army civilian professors, as well as civilian officers from the Department of State and visiting professors from civilian universities.

Theodore Roosevelt Hall at Fort Lesley J. McNair

Lee E. Surut
Major General, USA
Commandant

NATIONAL WAR COLLEGE

The organization of the National War College is aimed at simplicity, flexibility, and maximum ease of communication between students and faculty and among faculty members. The Commandant, a military officer of two-star rank, occupies a nominative position which rotates among the Army, Navy, and Air Force. Advisers include a State Department International Affairs Adviser, two officers who serve as Dean of Students and Administration and Dean of Faculty and Academic Programs, and a small Department of Administrative Services. The National Defense University provides major administrative and logistical support for the college. The curriculum, all academic scheduling, and the Guest Lectures Program fall under the province of the Dean of Faculty and Academic Programs.

The faculty includes three departments emphasizing broad areas of responsibility rather than narrow academic specialties. The Department of Military Strategy studies the

foundations of national strategy, national security, and the U.S. military posture. Faculty in the Department of International Studies concentrate on the relationship between U.S. national security and the world environment. The International Affairs Adviser is concurrently chairman of the department. The Department of Domestic Studies examines the relationship between the domestic environment and national security, management of resources, and decisionmaking.

Thomas G. Darling
Major General, USAF
Commandant

ARMED FORCES STAFF COLLEGE

The Armed Forces Staff College, located in Norfolk, Virginia, was incorporated into the National Defense University in August 1981. Its commandant is a general or flag officer who occupies a nominative position which rotates among the Army, Navy, and Air Force. He is directly responsible to the University President for fulfillment of the college mission—to prepare selected midcareer officers for joint and combined staff duty.

Future wars—and future peace efforts—are likely to require the integrated efforts of all Services, numerous government agencies, and many friendly nations. To be effective, the professional officers of these organizations must master the concepts, principles, and techniques of joint and combined operations. The Armed Forces Staff College provides a unique educational opportunity for selected officers of U.S. and allied organizations to study these subjects.

Normandy Hall, Armed Forces Staff College at Norfolk, Virginia

While the college focuses on joint and combined operations planning, it also emphasizes intellectual and professional development in a variety of areas that includes national strategy, defense management, communicative arts, self-assessment, innovation, and several elective fields. The college organization is structured to develop understanding and appreciation of the various national, agency, and Service interests and concerns that bear on the common defense. The curriculum is designed to promote a spirit of cooperation and understanding that is critical to any joint or combined endeavor.

The college accomplishes its mission through four courses of study:

a. The 21-week Joint and Combined Staff Officer Course prepares selected midcareer officers for joint and combined staff duty.

b. The six-week Joint Command, Control, and Communications Staff and Operations Course acquaints middle-grade officers with existing C^3 systems and procedures for command management and operations associated with joint military command centers.

c. The two-week Reserve Officer Orientation Course teaches the joint planning process with major emphasis on peacetime deliberate planning and time-sensitive planning.

d. The two-week Joint Electronic Warfare Staff Officer Course trains middle-grade officers in the concepts, procedures, and applications of electronic warfare in support of C^3 countermeasures.

MOBILIZATION CONCEPTS DEVELOPMENT CENTER

The Mobilization Concepts Development Center is a specialized research and policy organization which operates under the direction of the President of the University. The center provides intellectual and analytical resources on a broad spectrum of issues related to mobilization, deployment, and industrial preparedness planning to the Secretary and Deputy Secretary of Defense, to the Chairman of the Joint Chiefs of Staff, the Commanders in Chief of the military Services, and executive branch departments and agencies. The center staff conducts derivative and original research and provides consultation on policy matters and issues of major concern to mobilization practitioners and war planners.

In addition to these activities the center provides expertise for the enhancement of the academic programs of the Industrial College of the Armed Forces and the other constituent elements of the National Defense University. Together with its research and academic endeavors, the center is also responsible for developing a program of outreach activities designed to involve knowledgeable authorities representing industrial, academic, media, and other opinion-making communities in the public debate over allocation of national resources and to advance the awareness of defense and mobilization concerns of such representatives.

The center provides specialized expertise in the design and implementation of national mobilization exercises to the Joint Chiefs of Staff, Office of the Secretary of Defense, and civil agencies. In addition to its contribution to U.S. defense and mobilization policy the center is active in advancing the conceptual foundation for cooperative planning for more effective international approaches to mobilization of combined military, industrial, and natural resources of allied and other strategically important nations.

As part of its institutional development the center is engaged in maintaining a research collection devoted to mobilization, industrial preparedness, and deployment planning of a quality and depth sufficient to establish it as the

definitive national repository of such materials.

The center staff is composed of five civilian and three active military senior research fellows. The staff structure is designed to provide an optimum combination of first-hand mobilization experience, research competency, and academic scholarship sufficient to establish the center as a leading contributor to the evolution of more effective national mobilization policy and war plans.

Collocated with the Industrial College of the Armed Forces in Eisenhower Hall, the center provides a conducive setting for discussions between staff members and senior representatives of the mobilization community toward the end of advancing the intellectual depth available to military and civilian leadership in national strategy and policy formulation.

MOBILIZATION CONCEPTS DEVELOPMENT CENTER (MCDC)

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STRATEGIC CONCEPTS DEVELOPMENT CENTER

The Strategic Concepts Development Center was established by the Secretary of Defense and the Joint Chiefs of Staff in December of 1981. The center operates under the jurisdiction of the President of the National Defense University, and it is located in Theodore Roosevelt Hall, home of the National War College.

By the terms of its charter, the center conducts independent policy reviews, develops new concepts, and produces long-term planning initiatives for the Secretary of Defense, the Deputy Secretary of Defense, and the Chairman of the Joint Chiefs of Staff. Its analyses focus on joint and combined strategy, force structure design, and alternative employment options. In its first year of existence, the center has completed several major projects for the Secretary of Defense and the

Chairman of the Joint Chiefs of Staff. It also serves as a resource for the Joint Chiefs of Staff and the Commanders in Chief of the Unified and Specified Commands. Another principal function is to conduct research in support of the National War College's mission of excellence in military education and research in national security.

The center is designed to be a small, high-level think tank. Its staff is composed of articulate thinkers not identified with any particular school of thought. Their task is to challenge existing concepts, provide creative alternatives, and apply intellectual rigor to issues of policy and strategy.

The center is staffed by both full-time and part-time Senior Research Fellows nominated by the resident colleges of the University, the Services, the Department of Defense, and other agencies concerned with national strategy. Final nominees are selected by the Director of the center and the University President, and are approved by the Secretary of Defense. In addition to a Director and a Deputy Director, there are eight full-time Senior Fellows: four civilian and four active-duty military, one from each of the four Services. Part-time participants include National War College faculty and students; officers on temporary duty from the Joint and Service Staffs, from the Unified Command Staffs, and from Service academy faculties; and individuals from the Department of Defense and other national security agencies. The civilians serve at the pleasure of the Secretary of Defense under limited-term appointments.

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WAR GAMING AND SIMULATION CENTER

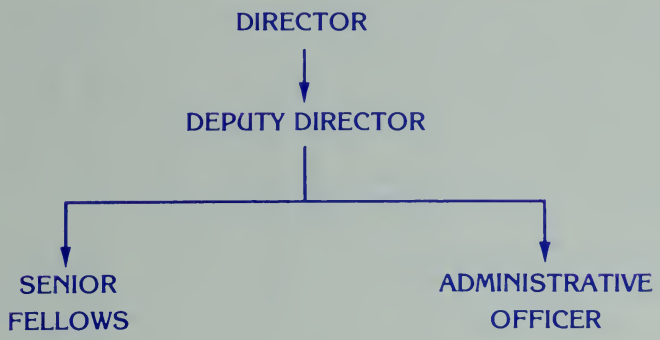
The War Gaming and Simulation Center began operating in May 1982 under the direction of the President as a dynamic research and education support group providing joint war-gaming and simulation support to the University and its components. It fulfills a wide range of requirements of consultation, development, and operation of war games and simulations.

The center is staffed by a mix of specialists in military affairs, international relations, operations research, and computer applications who have a wide range of experience in war gaming and simulation. Members of the center consult regularly with the offices of the Joint Chiefs of Staff, the Secretary of Defense, and other national agencies to develop joint war games, politicomilitary simulations, and models of mobilization, deployment planning, and global and theater-level operations.

The capabilities provided by the center substantially enhance the creative potential and effectiveness of both the Strategic and the Mobilization Concepts Development Centers and provide University students unparalleled opportunities for participation in active, innovative learning processes.

War Gaming in Hill Conference Center

WAR GAMING AND SIMULATION CENTER



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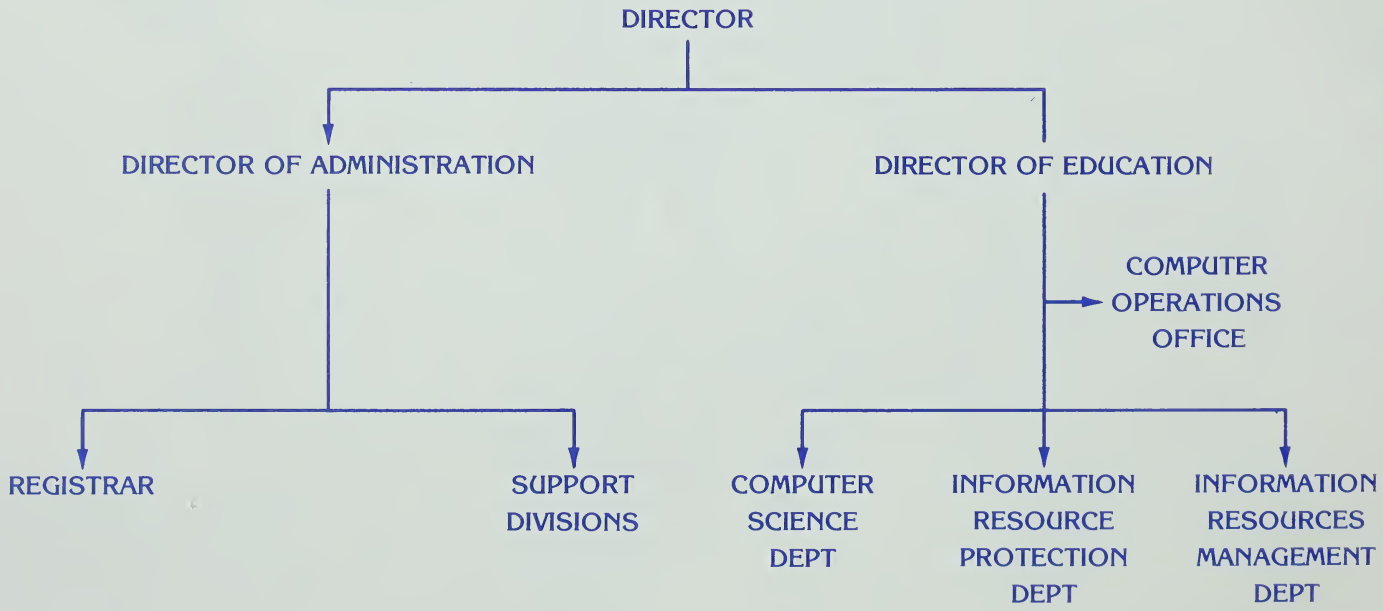
DOD COMPUTER INSTITUTE



THE DEPARTMENT OF DEFENSE COMPUTER INSTITUTE

The Department of Defense Computer Institute (DODCI), established by DOD Directive 5160.49 of 27 February 1964, is an element of the National Defense University and a leading educational institute responsible for teaching information resources management to senior military and civilian executives within the Department of Defense. In addition, as an element of the National Defense University, the institute supports the information resources management educational requirements of the University and its constituent colleges.

The mission of the Department of Defense Computer Institute is fivefold. It promotes excellence in information resources management (IRM) education for DOD senior and intermediate-level executives who oversee the planning, development, and operation of automated information systems (AIS) or who use AIS resources in support of their overall management responsibilities. It provides appropriate courses in various aspects of information resources management in response to Department of Defense needs, technological advances, new legislation, and IRM policy initiatives. It provides information resources management advisory services to Department of Defense AIS developers and users. It also provides appropriate courses in various aspects of information resources management in support of the educational mission of the National Defense University and its constituent colleges. And finally, it provides technical IRM assistance in support of the National Defense University mission and functions.

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Department of Defense Computer Institute class session

INSTITUTE OF HIGHER DEFENSE STUDIES

The Institute of Higher Defense Studies was established at the National Defense University in 1982 to provide an institutional focus for joint education programs addressing the needs of general and flag officers. The institute has developed an eleven-week, intensive, issued-centered pilot program for newly selected general and flag officers designed to deepen their understanding of the major factors influencing the employment of U.S. forces jointly and combined with those of allied nations. The course of study is focused on three major issue areas: (1) organizational structure and processes, (2) force employment concepts, and (3) support issues. Instruction in this program is conducted at the Xerox International Training Center, Leesburg, Virginia, and at field locations where students are brought into close contact with force-employment issues as viewed by U.S. commanders at the unified/specified command level.

The institute also is developing a broad range of educational programs designed to satisfy the continuing joint educational needs of general and flag officers. Those programs capitalize on modern educational aids and are tailored to each general and flag officer's specific needs.

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UNIVERSITY LIBRARY

The National Defense University Library collection at Fort McNair consists of over 230,000 bound volumes, pamphlets, periodicals, and Government documents in open stacks, and 100,000 classified documents housed in a security vault. The library is a readily available source of information on the theory and conduct of national security affairs, international relations, and management and mobilization of resources.

The book collection emphasizes history, management, military science, political science, social sciences, and physical science and technology. Housed in open stacks in Roosevelt Hall, the books are organized according to the Library of Congress Classification System.

Three branches currently assemble and maintain the library's information resources: the Acquisitions Branch, Cataloging Branch, and Reader Services Branch. The branches, as well as the Curator of Special Collections and the Course Support Liaison Librarian, work under the guidance of the Library Director.

Specific information resources include the Document Center, which is located on the ground floor of Roosevelt Hall. This activity acquires, catalogues, stores, and controls distribution of all security-classified documents for the use of the authorized members of the University. The collection consists of approximately 100,000 classified and unclassified documents, periodicals, and student papers.

Government agency publications and congressional materials that are of permanent value to the library are catalogued and shelved in the book collection in the Roosevelt Hall Library. This material is listed in the card catalogue by author, title, and subject. Uncatalogued Federal materials are located on the first deck of the Eisenhower Hall Library stacks.

Both the Eisenhower Hall and Roosevelt Hall library sections house the Reference Collection of works in specialized areas of interest to the University as well as general encyclopedias, standard and foreign language dictionaries, biographical guides, handbooks, almanacs,

gazetteers, educational directories, and bibliographies. Various other information resources are also available.

The library contains approximately 1,100 serials of newspapers and periodicals. These publications are not catalogued, but many back issues are shelved alphabetically in the stacks adjacent to the Periodical Reading Room in Eisenhower Hall. Current issues of both newspapers and periodicals are displayed in the Eisenhower Hall reading room and a smaller assortment can be found in the Memorial Reading Room in Roosevelt Hall.

The library's special collections include personal papers, rare books, academic histories, and historical photographs. Significant among the personal papers are those of Generals Maxwell D. Taylor, Paul D. Adams, Lyman L. Lemnitzer, and Andrew J. Goodpaster. There are books from the personal libraries of Admiral Arthur Radford and the noted American military historian, Hoffman Nickerson. Recent additions are the book collections of Dr. Ralph Powell and General Albert Gerhardt.

Five multidisciplinary on-line search services provide immediate access to bibliographic citations and abstracts from a vast array of books, journals, newspapers, technical reports, and Government documents.

A Nonprint Media Center is located in Eisenhower Hall. Audio and video recordings in management, psychology, speed reading, selected fiction, and foreign languages are available.

The Armed Forces Staff College in Norfolk, Virginia, maintains a separate collection at its library in Normandy Hall. Assets include 82,000 catalogued books and reports, 1,234 periodical and serial titles, 35,000 classified documents, and 10,000 microfilm and microfiche items. Areas of emphasis closely parallel those of the Fort McNair collection.

Open House at the National Defense University Library

BOARD OF VISITORS

The Board of Visitors is a professional advisory body—a working rather than an honorary group—of distinguished civilian and military members, whose functional and professional expertise spans the mission-specific curricula of the University's colleges. The board meets at least once each year and provides written observations and recommendations on matters relating to the successful accomplishment of the mission assigned to the University.

The NDU President serves as executive agent for the Joint Chiefs of Staff in coordinating the advisory functions of the board.

National Defense University Visitors 1983

Mr. William K. Brehm, Chairman of the Board for Systems Research and Application Corporation.

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The Honorable Elmer B. Staats, Former Comptroller General of the United States.

NATIONAL DEFENSE UNIVERSITY FOUNDATION

The National Defense University Foundation is a charitable and educational body constituted to encourage support for and to further the educational and professional goals and traditions of the National Defense University. The Foundation consists of Honorary Directors, a Board of Directors, and a membership that is open to individuals, corporations, and other organizations interested in the objectives of the Foundation. Membership categories are: Associate, Contributing, Sustaining, Life, Corporate, Graduate, and Honorary. The Foundation supports educational conferences and lectures; fellowships and professorships; research, writing and academic awards; faculty and student publications; student athletic programs; receptions and end-of-year functions; and faculty enrichment. The Foundation has been granted tax-exempt status and was officially incorporated in the District of Columbia in July 1982. Contact with the Foundation may be obtained through its President, Dr. A. William Schulte, National Defense University Foundation, Inc., Dwight D. Eisenhower Hall, Fort Lesley J. McNair, Washington, D.C. 20319, telephone (202) 693-1045/7064.

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JEANNE HOLM, Major General, USAF (Ret.); Author and Lecturer.

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JOSEPH S. SANSONE, Jr., Rear Admiral, USN; President, ICAF Alumni Association.

A. WILLIAM SCHULTE, President, National Defense University Foundation.

DAVID M. SPARLING, Executive Vice President, Ford Aerospace & Communications Corporation.

UNITED
STATES ARMY
"OUR LIBERTIES REST WITH OUR PEOPLE'S
THE NATION'S SPIRITUAL, POLITICAL, MILITARY AND ECONOMIC REALITIES
UPON THE SCOPE AND DEPTH OF THEIR UNDERSTANDING OF
IT IS THE HIGH MISSION OF
THE INDUSTRIAL COLLEGE OF THE ARMED FORCES TO DEVELOP
SUCH UNDERSTANDING AMONG OUR PEOPLE AND THEIR MILITARY
AND CIVILIAN LEADERS"
DWIGHT D. EISENHOWER
PRESIDENT OF THE UNITED STATES
OF AMERICA
DEDICATION OF THE ACADEMIC BUILDING
THE INDUSTRIAL COLLEGE OF THE ARMED FORCES
SEPTEMBER 6, 1960

Foyer, Dwight D. Eisenhower Hall

INDUSTRIAL COLLEGE OF THE ARMED FORCES

The Industrial College of the Armed Forces conducts senior-level courses as well as research in mobilization and in the management of resources in support of national security. The programs of the college prepare selected military officers and senior career civilian officials for positions of high trust in the Federal Government.

CURRICULUM

The ICAF curriculum is multidisciplinary. To assure maximum development of professional skills the instructional method places heavy emphasis on individual involvement. Case studies and small group activities devoted to realistic and relevant topics are used to balance this approach with more traditional methods. The program places emphasis on building competence in the application of both qualitative and quantitative analytical skills. In addition, the student's ability to understand problems faced by senior-level decisionmakers is enhanced through exercises, simulations, and group research.

Development of executive communication skills is emphasized throughout the ICAF academic program. Students prepare individual written and oral reports and contribute to essays developed as part of group study projects. In addition, peer group interaction and rigorous faculty evaluation of student products help to develop a critical perspective. The program emphasizes the refinement of leadership styles suitable for operating effectively in joint and interagency policy-making and decision-making environments.

The program also emphasizes policy formulation and management in the executive branch to include manpower and personnel management, systems acquisition, interagency relations, bureaucratic dynamics, and budgetary and financial management as a means of enhancing executive effectiveness. Along with professional ethics, these themes provide opportunities for developing sensitivities in applying contemporary managerial techniques with an understanding of the human dimensions of organizations.

Baruch Auditorium, Eisenhower Hall

Maximum student involvement, mastery of essential subject matter, and acquisition of additional skills are required for optimizing the benefit of the ICAF program. In many cases, the academic experience is a shared one. The ICAF faculty and staff play an essential role in providing the expertise to which the student adds his own thoughts and experiences. Given the critical challenges confronting the United States, and the positions of high trust and executive responsibilities for which ICAF graduates are destined, it is essential that both students and faculty maximize the educational opportunity afforded by their attendance.

PHASE I - PUBLIC EXECUTIVE PERSPECTIVE

During this introductory phase, students from the Industrial College of the Armed Forces and the National War College are divided into joint seminar groups for the purpose of examining the roles individual behavior factors play in the development of executive skills. Each student receives a Career Planning Workbook several months before reporting to the University. This workbook contains a series of exercises designed to stimulate the student's thoughts about his or her personal and professional growth. The Myers-Briggs Type Indicator and the Strength Deployment Inventory are completed by all students during the first week. These inventories are designed to indicate personal strengths, individual behavioral preferences, and changes under stress. Students are also encouraged to participate in a voluntary, comprehensive health and physical fitness assessment. The entire assessment is designed to identify for the student areas for individual development during the year, as well as in following assignments. Following this assessment, instruction is directed toward developing executive skills. Based on the instruments previously administered, students are given the opportunity to sharpen their interpersonal decision-making and negotiating skills. The focus is on the individual in a small group setting, expanding into a larger decision-making and bureaucratic context for the Federal executive. Concurrently, the ICAF students participate in two workshops designed to enhance their understanding of essential economic principles and information resources management.

PHASE II - NATIONAL SECURITY AND MOBILIZATION MANAGEMENT

Phase II covers a broad range of material designed to provide an understanding of the international and domestic influences on national security policy. This phase also provides both an historical and a current perspective on emergency preparedness planning, and the formulation and execution of national security policy.

Phase II is divided into three major parts. The first deals with domestic factors affecting national security policy and the Nation's ability to mobilize in an emergency. This includes an examination of the conceptual dimensions of emergency preparedness planning and the organizational structures and processes of mobilizing the Nation for war. In addition, a critical examination of national economic goals and policies, economic influences on defense, and the economics of social issues and energy takes place at this time. Attention is focused on the Presidency, the Federal judiciary, the Congress, and on congressional-executive relations. This area of study culminates with a concentrated block of instruction on the legislative process and a day-long visit to Congress.

The second portion of Phase II examines the international framework of U.S. national security, and develops an understanding of the international economic interdependencies affecting U.S. foreign policy. This section begins with an examination of global structures, processes, and issues, and focuses on problems facing U.S. policymakers.

Finally, within the context of the domestic and international environments studied earlier, the third part of Phase II addresses specific issues of U.S. military strategy, deployment and employment of military forces, mobilization plans, structures, and processes. Historical precedents are examined in order to establish a time-oriented sense of what may be achieved by a mobilized nation. A systematic exposition of the principles governing mobilization decisionmaking receives considerable emphasis.

PHASE III - MANPOWER RESOURCES MANAGEMENT

The Phase III focus is on manpower and organizational policy issues viewed in peacetime as well as wartime

perspectives. This phase begins with a broad treatment of the manpower management cycle with consideration given to policy issues in determining requirements and manpower acquisition. Manpower availability is considered in terms of demographic, political, economic, and sociocultural factors. The implications of total force planning are considered in depth. The history of the all-volunteer approach to manpower recruitment and retention is examined, and consideration is given to peacetime conscription and National Service as possible alternatives. Finally, a number of personnel and organizational issues are examined to uncover realistic policy options for attaining positive commitment to service, high morale, discipline, unit cohesiveness, and more effective performances. Student exercises and case studies are used to analyze and solve personnel management problems. The phase concludes with an integrating Manpower Mobilization Exercise.

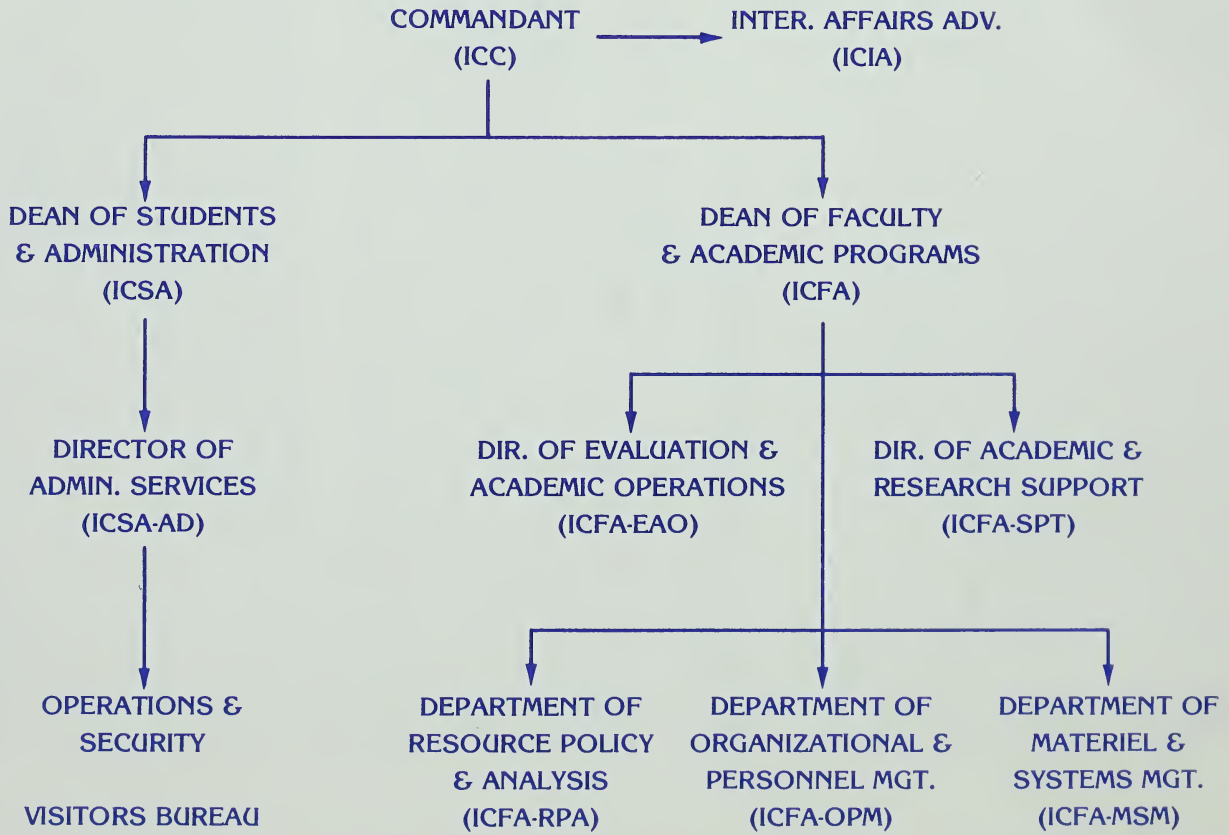
PHASE IV - INDUSTRIAL RESOURCES MANAGEMENT

This phase examines the major systems acquisition process, the defense industrial base, and military logistics policy and issues from a variety of perspectives.

The defense systems acquisition process is examined through a combination of lectures, seminars, and a computer-based simulation. In the Weapons Acquisition Simulation (WAS), student groups, using cost-benefit analysis, make key decisions on trade-offs between technical performance, development and production schedules, and life-cycle costs associated with the development and procurement of a major weapons system.

With a broad understanding of major systems acquisition as a backdrop, the Defense Industry Analysis (DIA) program examines a number of major defense industries from an executive perspective that takes into account the roles and viewpoints of congressional committees, defense contractors, and other interested agencies in the public and private sectors. The defense industries are explored through a series of seminars which highlight the numerous issues involved. Following this academic preparation, the students move to on-site facilities, both domestic and foreign, for an in-depth study of the practical issues which confront industrial

INDUSTRIAL COLLEGE OF THE ARMED FORCES (ICAF)



management, and the processes and techniques involved in their resolution. Upon returning to ICAF, each DIA study group prepares and briefs its report to the assembled student body.

Military logistics policy and issues are examined from the viewpoints of the Services and the DOD agencies. Issues related to resource mobilization as well as the support of the Unified Commands and the Rapid Deployment Joint Task Force are highlighted.

PHASE V - JOINT TRAINING AND EXERCISE

In Phase V, the concepts and skills developed during the academic year are brought to bear in a joint exercise with the National War College. The phase begins with a period of training. Following this, the students are divided into a large number of joint seminar groups which independently conduct PRUDENT STRIDE, an exercise involving joint service strategy, force structuring, crisis management, employment and deployment planning, and a war game. Each student team, starting with a national strategy, develops supporting military strategy and a prudent-risk force structure. Funding and personnel strength limitations are introduced which cause the student groups, in most cases, to down-size the force structure. A situation is then introduced which requires a response involving, among other things, economic and political actions, and use of the deployment and employment models. As a conclusion to the exercise, a joint war worldwide blue/red game is played.

ELECTIVES PROGRAM

The Electives Program complements the Core Program. This program allows participants some latitude in tailoring their course of study. All students must earn six elective credits. Depending on individual needs, students may be required to take foundation courses as part of the electives program. A description of ICAF elective courses follows in Annex B.

RESEARCH PROGRAM

The Research Program at the Industrial College provides both students and faculty an opportunity to explore in-depth mobilization issues and other selected subjects related to the ICAF mission. The college encourages creative thinking, stimulating researchers to challenge, substantiate, or modify existing theory or practice. All students are required to conduct a major research project. This requirement is met by participation in the Mobilization Studies Program (MSP) or by participation in the Independent Research Program (IRP). However, on an exception basis, and with prior approval from the Dean of Faculty and Academic Programs, a few students may conduct individual research, each on a nonmobilization subject of individual choice.

MOBILIZATION STUDIES PROGRAM (MSP)

The Mobilization Studies Program (MSP) is the major research vehicle of the college. It provides the student an opportunity to examine major problems and issues associated with the mobilization of resources during emergencies or war, and to apply analysis in recommending practical solutions. The college prepares a number of carefully screened and timely mobilization topics of concern to senior policymakers in the national security structure.

The program is organized into research teams, each investigating an approved topic. Each research team has a faculty research adviser and consists of six to eight students. The college normally assigns students to research teams based on their indicated preferences. Faculty research advisers guide the research team in developing initial research design (including tentative organizational frameworks), and they provide guidance and counsel, evaluate the quality of contributions made by the research team members, help synthesize their contributions, and assist in editing the final report. Responsibilities are delegated to the students in a way that fosters maximum student participation in all phases of the research and writing effort. Each research team undergoes two in-process reviews during the academic year to monitor progress of the research project.

INDEPENDENT RESEARCH PROGRAM (IRP)

With approval from the Dean of Faculty and Academic Programs, and with a recommendation from the Permanent Faculty Adviser, a few students may choose to conduct independent research in mobilization or another topic relevant to the ICAF mission and of interest to the national security community. Students conduct such research in groups of from one to three members. In preparing independent research papers, students will be assigned a faculty adviser who provides counsel and evaluation throughout the research task.

Classroom meeting of seminar

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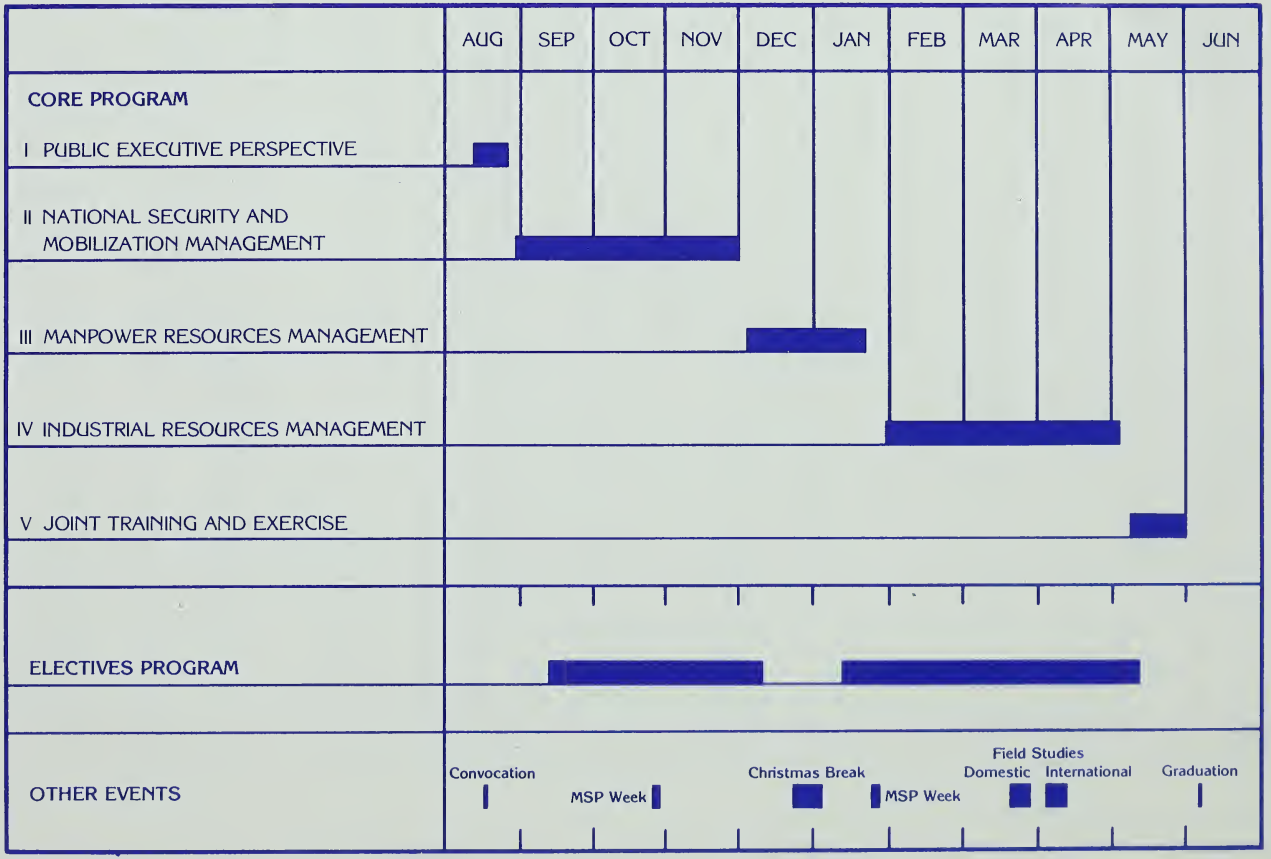
INDUSTRIAL COLLEGE OF THE ARMED FORCES

Academic Year 1983-1984



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Reception in the Rotunda of Theodore Roosevelt Hall

NATIONAL WAR COLLEGE

The National War College prepares selected personnel of the Armed Forces, the Department of State, and other U.S. Government departments and agencies to perform high-level command and staff policy functions associated with national security strategy formulation and implementation.

CURRICULUM

The Core Program provides each student with a comprehensive understanding of the development and implementation of national security policy and strategy. The program employs an active problem-solving learning mode in which students are encouraged to identify and diagnose issues, acquire and interpret relevant information and data, develop and analyze options, and prepare and present recommendations. The Core Program is closely integrated and consists of six principal themes: Skills for National Security; Foundations of National Security; Opportunities and Constraints in National Security; U.S. Interests and International Security; Strategic Planning; and Defense Policy and Military Strategy. The themes are addressed by the following courses:

Human Dimensions in National Security Affairs. An introduction to the role individual behavioral factors (e.g., values, perceptions, motivations, lifestyles) play in ethics, interpersonal relations, group dynamics, and decision-making. A particular emphasis will be placed on the importance of behavioral factors to creativity and how to think innovatively.

Creative, Critical, and Systematic Thinking. An examination from the policymaker's perspective of various policy analysis and decision-making approaches to management and creative problem-solving, to include the use of computers in defense information management.

Art of War. An examination of periods in military history that signaled changes in the nature of war and its conduct; the American approach to war; and of the ideas of classical and modern strategic thinkers so as to assess their influence and contemporary relevance.

International Security Environment. An appraisal of issues and trends in the international political and economic system. A consideration of the institutions and instruments available to achieve national objectives, alleviate tensions, reduce or eliminate sources of conflict, prevent war, and refine judgments about uses of military power.

Terrorism and Counterterrorism. This political-military simulation focuses on the decisions involved in developing a strategy and for using the instruments of statecraft in countering and resolving a terrorist incident with international implications.

Politics, Policy, and Resource Allocation in the American Political System. An analysis of the roles, relationships, and influence of the legislative branch, other public and private institutions and groups, and executive branch legislative liaison and public affairs activities on security policy development and the allocation of resources. This course will also cover guidelines for appearing before congressional committees and relations with the media.

Policy Planning and National Security Decisionmaking. An analysis of the national security policy planning and decision-making process within the executive branch and the National Security Council system with particular emphasis on the Department of Defense and its major components.

International Security Studies: U.S. Interests and the Major Powers and Regions. A systematic analysis of security conditions, policies, and programs and their impact on the defense and foreign policies of selected countries. A review of the security factors that influence and shape national policies. An appraisal of security commitments and agreements and their implications for U.S. interests and programs. Practical exercises in security issue identification and resolution conclude each regional study.

National Security Policy Decisions. A policy formulation and decision exercise. This exercise focuses on policy options for presidential decision and builds on the exercise on regional security issues in the International Security Studies course.

Strategic Planning for Joint and Combined Operations. An examination of military strategy and strategic planning

requirements for the conduct of theater-level joint and combined operations. The course focus is on strategic, tactical, and doctrinal concepts and their use in developing force application strategies, contingency and operations plans, and the conduct of joint operations.

U.S. Defense Policy and Military Strategy. An analysis of current U.S. defense policies and the translation of those policies into military strategy and force requirements. The course assesses the rationale, logic, and implications of defense policies, identifying strategic issues and defense trends, and then focuses on the translation of that policy into military strategy and force requirements. The course builds on the issues and trends identified in the International Security Studies course and the principles identified in the Art of War course. Within the Core Program various opportunities for active involvement are offered by the following exercises and simulations.

Strategic Nuclear Conflict Management. A conflict management political-military simulation designed to explore the implications of escalation in conflict; the problems and uncertainties escalation poses for decisionmakers; and the difficulties inherent in deescalation and war termination.

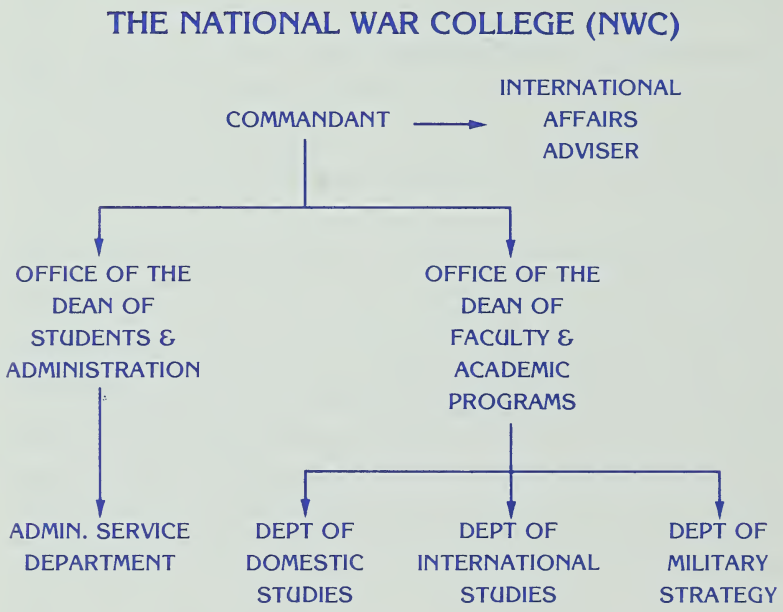
Strategy and Force Development. This exercise builds on the policy decisions reached in the National Security Policy Decisions exercise. Phase I focuses on the translation of national security policy decisions into military objectives, strategic requirements, and the development of a preferred national military strategy, desired force capabilities and characteristics, and required force levels. Phase II focuses on the force levels that can be achieved under constrained fiscal guidance, the changes required in strategy and/or force mix, and a risk assessment in terms of what can and cannot be accomplished.

Contingency Planning and Force Employment. A crisis management political-military simulation and current forces capability exercise in contingency planning and force application to provide the opportunity to apply knowledge developed throughout the year. Phase I focuses on the diplomacy of crisis management and development of contingency plans to meet a regional crisis with worldwide

implications. Phase II focuses on contingency plan execution with forces being deployed and employed.

ELECTIVES PROGRAM

A full range of elective courses, listed in Annex B, complements the Core Program. Additionally, NWC students are encouraged to arrange attendance at selected ICAF presentations and seminars of particular interest when there is no conflict with the National War College schedule.


THE NATIONAL WAR COLLEGE (NWC)
COMMANDANT
INTERNATIONAL AFFAIRS ADVISER
OFFICE OF THE DEAN OF STUDENTS & ADMINISTRATION
OFFICE OF THE DEAN OF FACULTY & ACADEMIC PROGRAMS
ADMIN. SERVICE DEPARTMENT
DEPT OF DOMESTIC STUDIES
DEPT OF INTERNATIONAL STUDIES
DEPT OF MILITARY STRATEGY

RESEARCH: STRATEGIC STUDIES PROGRAM

The Strategic Studies Program is the major research program for both students and faculty at the National War College. The goal of this effort is to produce valuable studies for agencies concerned with national or military strategy, thereby making the college and University a center for strategic thought.

All students and faculty are involved in this program as are the agencies sending students. The agencies forward strategic topics they wish explored to the Research Directorate, and they remain involved throughout the entire process by providing an individual sponsor for the project. This individual is expected to maintain a close relationship with the students and faculty in a highly iterative process. The agencies are also asked to evaluate the research paper. Faculty members choose to supervise projects in which they have expertise. They hope to expand their knowledge of a discrete field while directing the research effort. Faculty supervisors also evaluate the contributions the students make to the overall research effort.

All students are required to work on a specific research program during the academic year. Because the time is short, and there are many conflicting demands on student time, students are asked to work in small groups (the norm is from three to five students) and in areas in which they already have some expertise. In this way, they too will broaden their knowledge.

Should there be no topic forwarded by an agency that suits the particular expertise or interests of a student (or should a student prefer to work as an individual), he or she is encouraged to formulate a research topic. The only requirements are that the subject be of strategic interest, that an interested agency be found to sponsor the research, and that a faculty member be found to supervise it. This has not proved to be difficult.

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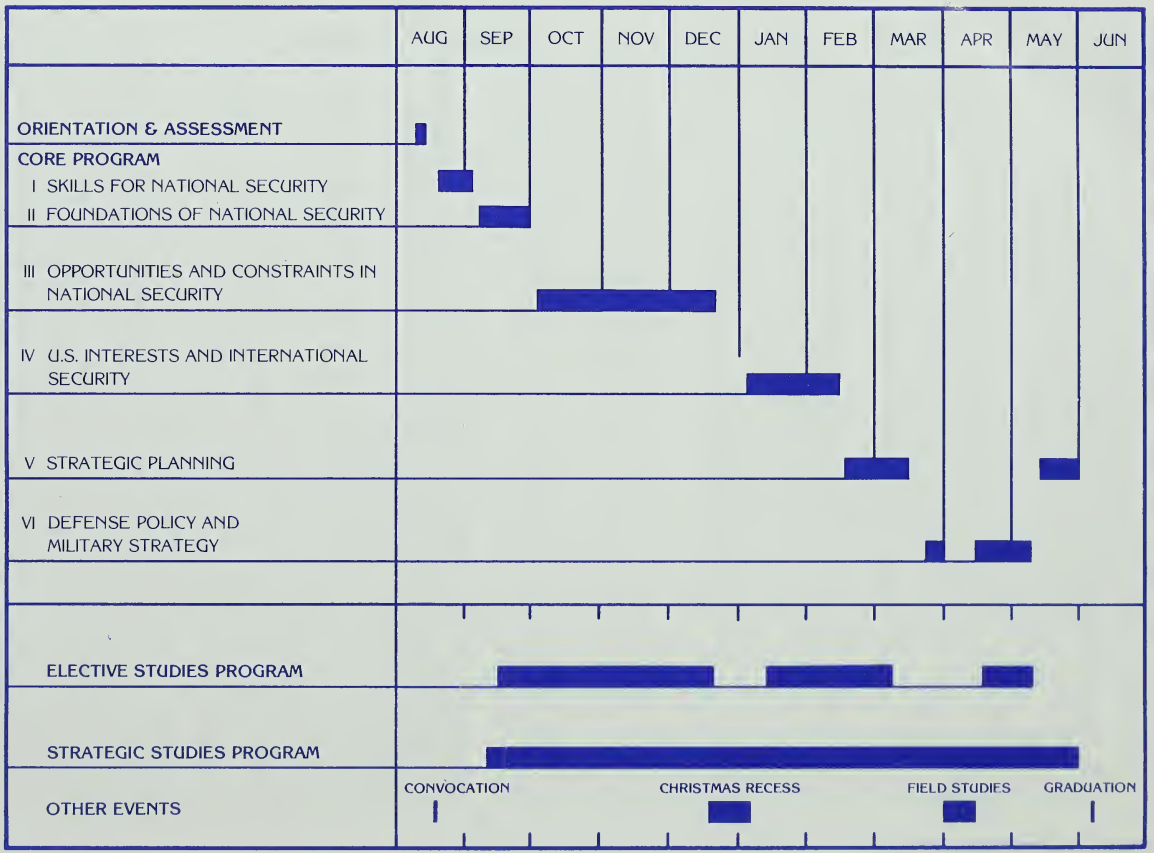
THE NATIONAL WAR COLLEGE

Academic Year 1983-1984



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Convocation for the National War College

Foyer, Normandy Hall

ARMED FORCES STAFF COLLEGE

The Armed Forces Staff College prepares selected midcareer officers for joint and combined staff duty. The college accomplishes this mission through three courses of study: the Joint and Combined Staff Officer Course; the Joint Command, Control, and Communications Staff and Operations Course; and the Electronic Warfare Course.

CURRICULA

THE JOINT AND COMBINED STAFF OFFICER COURSE

The Joint and Combined Staff Officer Course is made up of eight general areas of study. These areas, referred to as programs, are generic groupings of courses that deal with similar activities or subjects. The courses provide an understanding of joint-combined operation planning in light of U.S. military capability and the environment in which it operates.

The curriculum outlined below is presented in topical rather than chronological sequence. Instruction is scheduled to provide successively higher learning experiences. Lectures and other activities are interspersed among instruction sessions to add depth and variety to the curriculum.

Program One—*Orientation and Administration.* This program presents preliminary information about the curriculum. It includes various ceremonies and briefings on policies and procedures to orient the student to the college. The Self-Assessment Course provides instruction and exercises designed to promote personal and professional growth of the midlevel career officer.

Program Two—*Joint and Combined Operations Planning.* This program teaches joint and combined planning as a logical process using two subprograms, Joint Planning and Joint Operations.

Joint Planning emphasizes the phases of the joint planning process in the step-by-step development of a common scenario. The subprogram starts with the study of the reorganization and command relationships in the U.S. military command structure and NATO. The students learn and practice the techniques and procedures of concept

development in a five-step process. This provides the basis from which the students then examine the doctrine, principles, considerations, and techniques used in planning to deploy and employ U.S. forces. The students learn procedures of the Joint Operations Planning System (JOPS) and use the appropriate automated data processing systems.

The Joint Operations subprogram allows the students to demonstrate their knowledge of the joint operation planning system and the crisis action system by planning a joint operation in a realistic scenario. A NATO exercise examines some military, psychological, economic, political, and geographic aspects of the North Atlantic Treaty Organization.

Program Three—*International Studies.* Familiarizing the students with the broad international environment in which joint and combined forces operate and using seminar discussions and lectures by guest speakers, this phase examines factors affecting the formulation and execution of national policy and strategic planning. Specific international areas are covered by additional guest speakers throughout the curriculum. Students may participate in a seminar on U.S. foreign policy as an elective.

Program Four—*Defense Management.* Four courses address DOD management systems, leadership/management theories and practices, the impact of social change on managing human resources, and management of security assistance programs. The Defense Resources Management Course investigates the process used by the Defense Department to allocate and manage its resources. The Human Resources Management Course surveys motivational theory, examines situational leadership theory, and affords students the opportunity to identify their prevailing leadership styles. A brief course dealing with military sociology encourages students to develop an increased understanding of social changes and contemporary social issues within the armed Services. The Joint Staff Officer and Security Assistance Course examines the process by which the U.S. Government assists friendly nations through foreign military sales.

Program Five—*Self-Assessment.* In this program, the students assess their careers, personalities, values, and attitudes. They develop time management skills and long-

range and short-range personal goals and objectives. The students examine their personal motivations, attitudes, and values, and how these attributes influence their interaction with others.

Program Six—*Communicative Arts.* Focusing on improved communicative skills essential to the successful staff officer, this program provides students an opportunity to improve individual writing, reading, and speaking skills. The Major Writing Exercise requires the student to research, organize, and prepare a 3,000-word paper on a military topic. Selected students who need English review attend a 12-hour refresher course titled Advanced Composition Seminar and then write a somewhat shorter paper. All papers receive individual critical evaluation.

Program Seven—*Electives.* This program is designed to enhance professional development by providing students optional courses in addition to the basic curriculum.

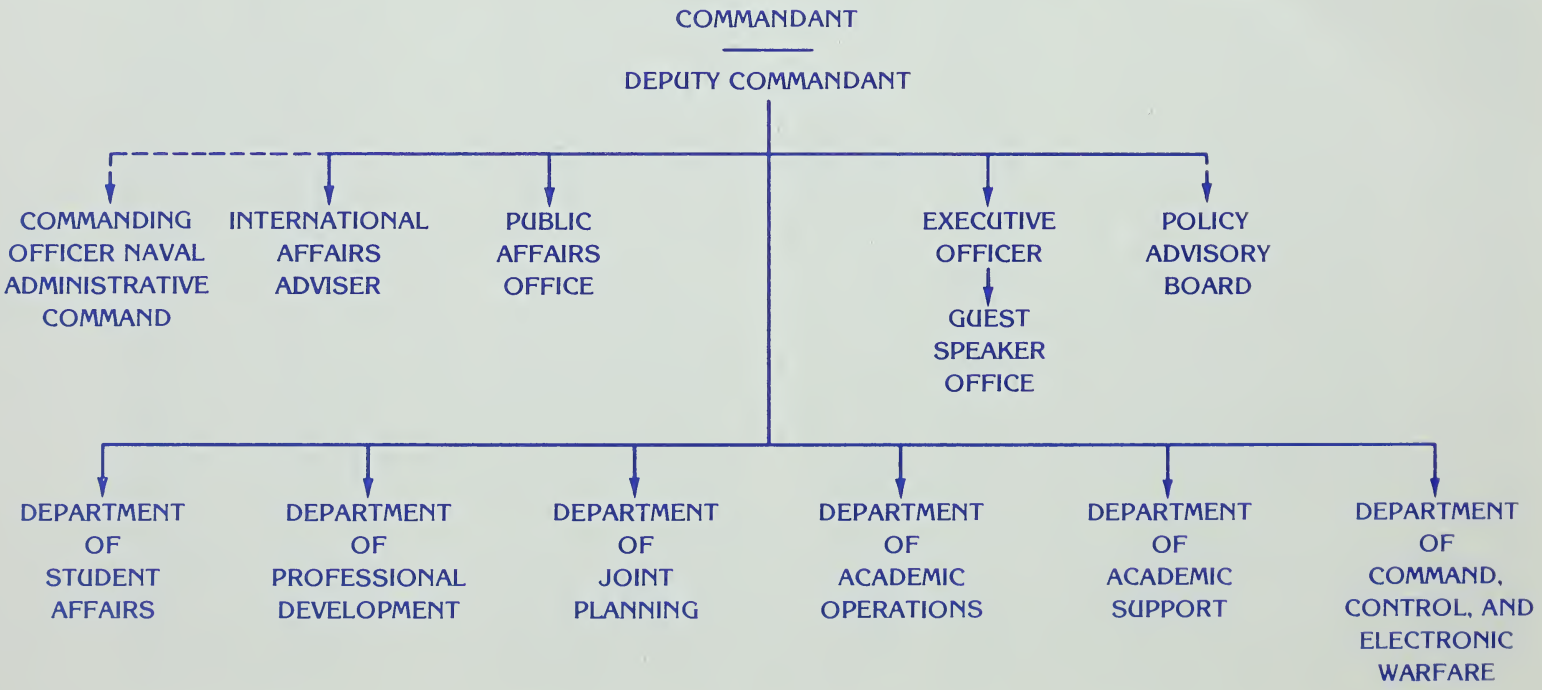
Program Eight—*U.S. Military Forces.* A three-week program introduces U.S. Army, Navy, Marine Corps, Air Force, and Coast Guard missions, organizations, and major capabilities.

Allied Officer Orientation. This orientation acquaints allied students attending the Joint and Combined Staff Officer Course with life in the United States. It includes information on the administrative, operations, and social aspects of the college. Lectures are presented in U.S. history, government, and foreign policy. Several field trips are conducted to allow students to study and observe municipal, state, and national government organization and functions.

ELECTIVES

Each student is required to enroll in an elective course designed to increase his or her knowledge and improve performance capabilities in a selected area of study. Courses may vary in length and structure, and range in content from those directed towards improving communications skills to those which will enhance the student's ability to deal effectively with the demands of command. Courses currently available are described more fully in Annex C.

ARMED FORCES STAFF COLLEGE (AFSC)



THE JOINT COMMAND, CONTROL, AND COMMUNICATIONS STAFF AND OPERATIONS COURSE

The course indoctrinates nontechnical personnel who are being assigned to positions associated with joint command, control, and communications (C^3) operations within the defense establishment. As the C^3 environment is diverse and broad in scope, no attempt is made to train students to perform a specific C^3 job or task. Instead, the course is designed to acquaint personnel with the wide range of C^3 operations that extend through the national, theater, and tactical levels of command. Emphasis is placed on the procedures associated with current C^3 systems used to support the national command authority and the major commanders who control our military forces. This course supports the college objective by providing a broad understanding of joint C^3 procedures to selected military officers and DOD civilian personnel.

The presentations are primarily lectures with discussion and question-and-answer sessions. The C^3 course faculty is augmented by instructors of the Joint and Combined Staff Officer Course and by guests from within the C^3 community who have specific knowledge and expertise. Students make a one-week trip to command and control facilities within the Washington area which serves to reinforce classroom instruction and also gives the students a clearer picture of key command and control operations. Other field trips go to local area command and control facilities such as the Atlantic Command Center and components of the National Command System.

THE JOINT ELECTRONIC WARFARE STAFF OFFICER COURSE

The course is specifically intended to prepare those enrolled for duty as joint or combined electronic warfare (EW) staff officers, or Service EW officers operating in a joint environment, and to acquaint them with the varied aspects of coordinating joint EW activities and programs at the unified command or joint task force level. Within the broad and

Library, Armed Forces Staff College

diverse spectrum of EW, emphasis is placed on terminology, Service EW operational doctrine, organizations and equipment, and joint EW operations and exercise planning procedures.

The presentations are primarily lectures with discussion. The EW Division faculty is augmented by instructors of the Joint and Combined Staff Officer Course and by guest lecturers from various agencies and commands who are actively involved in EW activities and have first-hand knowledge and experience not possessed by faculty members. Visits to local EW-related activities and presentations by guest speakers may be added on a class-by-class basis as available. One hour is allotted for student discussion or presentations of current assignment responsibilities and EW perspectives.

OTHER COURSES

Joint Planning Orientation Course (JPOC). This is a 20-hour course designed to provide a grasp of joint planning to staff officers who are generally familiar with staff operations and who anticipate a joint or combined staff assignment. The course highlights the JOPS procedures with major emphasis on peacetime deliberate planning and the crisis action system.

Reserve Officer Orientation Course. This orientation is a two-week active-duty period for selected officers of U.S. Reserve components. They participate in portions of the Joint and Combined Staff Officer Course curriculum, including Organization and Command Relationships, Formulation of National Strategy, and Defense Resources Management. They will also complete the JPOC described above.

Flag/General Officer Seminar on Joint Planning. This three-hour seminar is designed to provide flag and general officers an understanding of the deliberate planning process as accomplished through the JOPS, the related crisis action system, and the joint deployment system. The seminar also addresses recent and proposed changes to the joint planning process.

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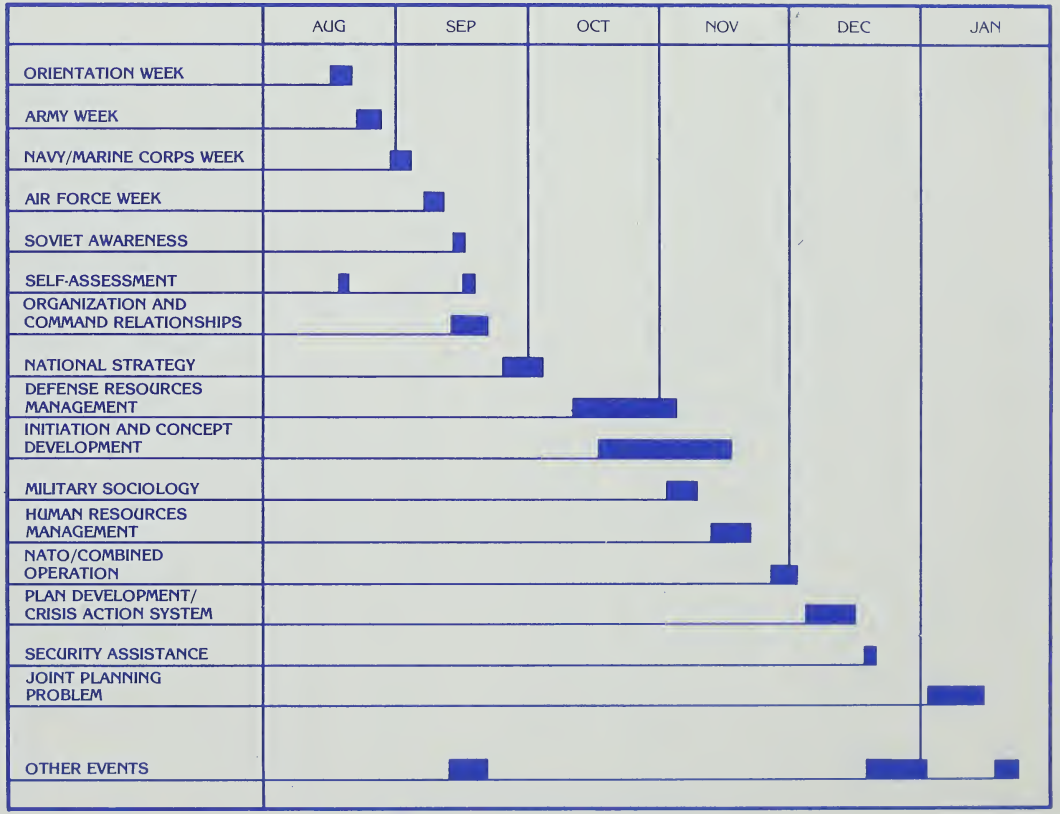
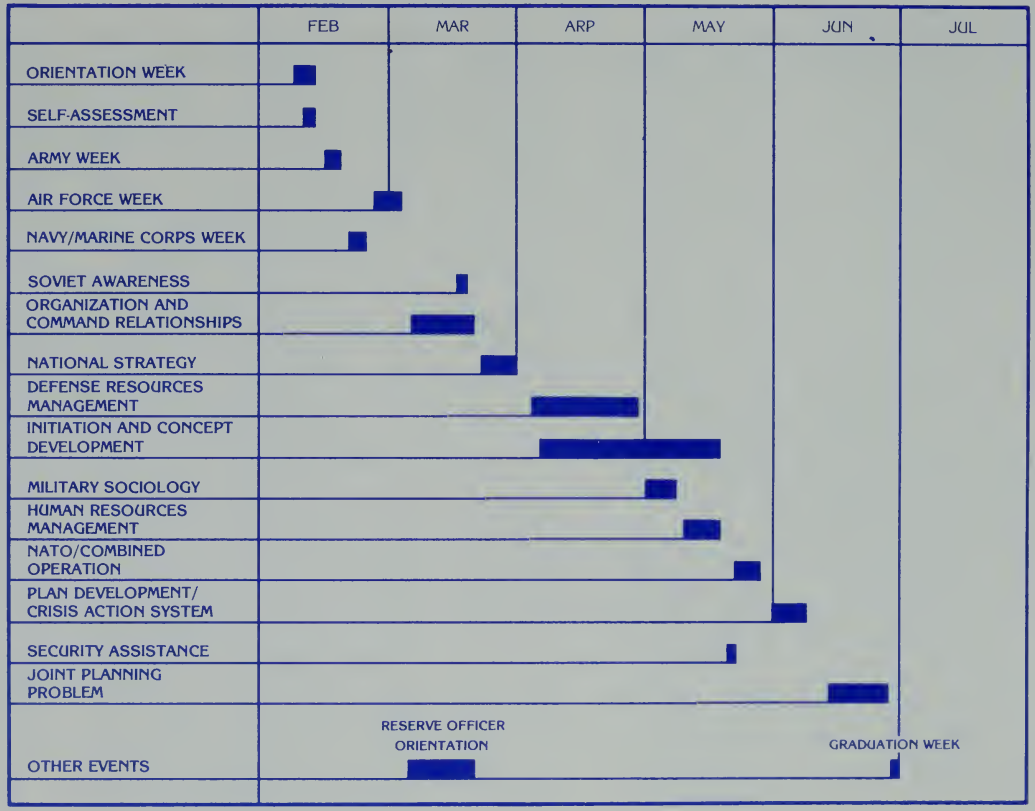
AFSC CLASS 74 SCHEDULE



AFSC CLASS 75 SCHEDULE



ANNEX A

The principal policies and procedures applicable to all NDU students include the following:

- *Security*—All necessary steps are taken to meet Government standards of security in safeguarding classified material, individual safety, and personal property. These provisions include use of controlled access, guards, personnel identification, and employment standards that are adequate to prevent unauthorized disclosure or loss of classified material and to enhance the welfare of university members.

- *Nonattribution*—Presentations by guest speakers, seminar leaders, and panelists, including renowned public officials and scholars, constitute an important part of university curricula. So that these guests, as well as faculty and other university officials, may speak candidly, the University offers its assurance that their presentations at the colleges, or before other NDU-sponsored audiences, will be held in strict confidence. This assurance derives from a policy of nonattribution which is morally binding on all who attend: without the expressed permission of the speaker, nothing he or she says will be attributed to that speaker directly or indirectly in the presence of anyone who was not authorized to attend the lecture.

- *Public affairs*—The Public Affairs Officer, acting on behalf of the NDU President, has primary staff responsibility for processing information requests, and serves as the focal point for contacts by National Defense University. The University will provide maximum allowable information consistent with the letter and spirit of the Freedom of Information Act. Release of information is limited by restrictions necessary to safeguard national security.

A student research paper, prepared in response to official requirements of the National Defense University, is the property of the U.S. Government. Any request received by the National Defense University for public release of a specific research paper will be considered on an individual basis in accordance with the provisions of the Freedom of Information Act.

• *Equal opportunity*—Students are selected for attendance at the National Defense University by their organizations or Services. These selections are based on the qualifications and potential of the individuals and not on race, sex, or religion. Concomitantly, all members of the NDU staff and faculty are employed under Government standards of equal opportunity.

• *Uniforms*—Military personnel will wear the Service duty uniform daily except when directed otherwise by competent authority. The uniform with blouse is mandatory on the following occasions: during visits by a four-star flag or general officer or the civilian equivalent within the Department of Defense; when personally receiving or escorting distinguished visitors, including allied and other foreign visitors; when participating in a platform presentation as a speaker, introducer, or moderator; when a Distinguished Lecture Program speaker is scheduled to make a presentation; or when directed in the weekly schedule or by separate memorandum by the NDU President or the college commandant.

Nonmilitary male personnel will wear suit or sports coat with tie. The jacket and tie are optional during the summer months. Female students will dress with equivalent suitability.

• *Attendence and hours*—The University operates on a five-day work week, Monday through Friday, except for legal holidays. Staff and faculty hours are generally 0800-1630, while student hours are prescribed by their weekly academic schedules. On occasion, evening programs may be included. Students are required to attend all classes and to participate in appropriate academic functions unless prevented by illness or emergency. The University expects that students will take full part in its program until the end of the academic year. Early departures are not permitted. All components will observe an academic recess over the Christmas holiday period. Students will remain in a duty status but will not be required to report to school. Those planning to be away from their local area of residence for more than 72 hours are required to take leave. For ICAF, NWC, and DODCI students, the local area of residence is the Washington metropolitan area; for AFSC students, it is the Tidewater area.

• *Advanced degree opportunities*—The Industrial College of the Armed Forces and The George Washington University jointly sponsor a program offering students an opportunity to work toward a master of public administration degree. The basic principle under which this program is offered is that it shall not interfere with, nor detract from, the ICAF curriculum. Therefore, the degree credit courses offered in lieu of the three electives per semester required of all students must be in subject areas appropriate to the ICAF fields of study.

The master of public administration degree program requires a total of 42 credit hours. Eighteen are granted for successful completion of the six courses offered as part of the ICAF elective program. The George Washington University grants 12 hours of transfer credit for the ICAF core curriculum on successful completion of validating examinations. The remaining 12 credit hours required may be earned during summer sessions. Individual students arrange with their agencies for permission to remain for the summer courses. The program can be conducted only when enough students desire it to warrant holding the classes.

Resident students of the other two colleges may enroll in local civilian university postgraduate programs providing such study does not interfere with their full participation in NDU programs. The Washington and Norfolk metropolitan areas offer numerous graduate program opportunities. Interested students may obtain additional information on these programs from their permanent faculty advisers or representatives of the academic community.

University President and Vice President with guest lecturer Vice President George Bush

On your mark, get set, go!

Go red! Go blue!

Cheering the team

Air Force concert, Singing Sergeants

ANNEX B

The Fort McNair campus offers a full range of educational, social, and recreational opportunities. Students have access to a wide variety of cultural resources and Government facilities owing to the campus location in Washington, D.C. Moreover, the close proximity of the Inter-American Defense College allows NWC and ICAF students the opportunity to form ties with Latin American students through *Operacion Amistad,* which encourages mutual social events, home hospitality, and activities in the community.

Programs such as the University Lecture Series, the Kermit Roosevelt lecture, Distinguished American Seminars, and Distinguished Visitors Day bring eminent speakers and prominent citizens to the Fort McNair campus. Students have the opportunity to meet and talk with many of these individuals during colloquia and luncheons.

Students of both the Industrial College of the Armed Forces and the National War College participate in field studies, a program in which small groups travel to various parts of the United States and overseas sites. At their destinations, students not only visit defense installations and industrial firms but discuss security-related or management issues at the ministerial or chief executive levels.

A wide range of athletic activities is available throughout the academic year. Competition between the resident colleges invites involvement in 13 sports, including basketball, softball, tennis, and volleyball. In addition, intramural softball is a popular student pastime and the annual Jim Thorpe Sports Day gives students the opportunity to compete with the other senior Service schools at the Army War College in Carlisle, Pennsylvania, in a broad array of athletic events.

Each college sponsors a women's club. In addition, evening social programs are organized by geographical locations to serve students who live in widely dispersed sections of the Washington metropolitan area.

The following elective courses complement the ICAF and NWC Core Programs and offer students a more rounded educational experience:

NATIONAL DEFENSE UNIVERSITY ELECTIVE COURSE DESCRIPTIONS

NOTE: *Some of the following courses may be unavailable for various reasons; some electives may also be added.*

QUANTITATIVE METHODS AND DECISION SYSTEMS (110-139)

110 QUANTITATIVE AIDS FOR EXECUTIVE DECISIONMAKING
(Fall and Spring—Foundation)

This foundation course is designed to show defense policymakers how to be critical consumers of quantitative analyses and how to use computers as aids in their decisionmaking. The course develops quantitative skills for application in the core curriculum and introduces tools and approaches useful for senior DOD and other Government managers. Major topics include a review of statistics, forecasting models, optimization and simulation programs, decision analysis, and a brief assessment of Soviet military operations research. The course entails several computer laboratory sessions in which students utilize executive work stations with preexisting computer programs for the techniques developed in the course.

114 MICROCOMPUTER PROGRAMMING
(Spring)

This is a course in computer programming fundamentals designed to provide the student with tools with which to write and debug programs with a minimum of effort. The student is provided hands-on experience with a microcomputer using the BASIC programming language and is introduced to higher-level programming languages. Advanced structured programming techniques will be featured. No prior computer experience is required.

115 INTRODUCTION TO COMPUTERS
(Fall and Spring)

A foundation course in computer fundamentals. Topics of the course include capabilities of computers, their limitations and applications, machine architecture, the state-of-the-art of computer hardware and software, security issues, and the writing of computer programs using the BASIC programming language. The purpose of the course is twofold: to provide a fundamental understanding of computer operations and ADP terminology in an effort to close the communication gap between the computer specialist and the manager, and to explore potential problem areas in the ever-changing field of ADP and extend to managers possible preventives for and solutions to these problems.

116 AUTOMATED INFORMATION SYSTEMS RESOURCE PROTECTION
(Spring)

A systematic approach to the development, implementation, operation, and enhancement of an AIS resource protection program. Addressed are the

concepts of risk management, trade-off analysis, and safeguard selection. The most modern AIS security techniques are analyzed. Also included is an extensive case study wherein AIS security principles are applied in practical situations. The course is designed to (1) provide managers with enough AIS resource-protection understanding to close the communication gap between computer security specialists and managers, (2) explore potential problems in the rapidly evolving field of AIS resource protection, and (3) equip managers with solutions to such problems wherever possible.

117 INFORMATION RESOURCE MANAGEMENT AND MILITARY MISSIONS
(Spring)

This course is designed to develop an understanding of electronic technology as it pertains to the military mission both in peace and in crisis periods, and to provide the basis for military commanders and staff to use the products of this technology effectively. Topics envisioned are technological overview (where the electronic technology is today and how it is being utilized in the Government and industry); operational use of the technology (how electronics is being used in weapon systems, warning systems, command and control systems, and management information systems); future technology (technological forecasts and the applicability of future technology to the Department of Defense mission); and application demonstrations (demonstration of near-term technological breakthroughs by industry).

118 AUTOMATED WAR-GAMING DESIGN
(Fall and Spring)

This course focuses on the practical problems of using automation in simulating warfare and the attendant decision processes. A complete joint strategic war game which can be played by other students on a microcomputer will be developed. The first game to be developed will focus on joint operations in Southwest Asia, around the North Cape and Kola Peninsula, or in a Cuban blockade. This game will emphasize the difficulties of modeling the decision process, strategic considerations from a global viewpoint, deployment for the specific theater of operations, and logisitics. The problems of validity of results, realism, and victory assessment will be addressed. A working knowledge of the BASIC computer language is recommended.

120 DECISION ANALYSIS FOR EXECUTIVES
(Spring—first six weeks)

Decision Analysis offers an approach to assist in structuring complex problems, codifying judgmental inputs, and making trade-off analyses. Use of this technique, which allows direct quantification of subjective variables, has grown dramatically in the last ten years. It is a tool especially suited for senior-level decisionmakers. This course examines basics including the types of decision analysis, problem formulation, quantification of subjective inputs, evaluation of alternatives, and trade-off analyses. Selected actual applications, such as the Air Force budget and procurement process, the Marine Corps development of program objective memoranda, and others, are used to illustrate the process. Where possible, computers will be used to assist in computations and sensitivity analyses. Students should emerge from the course with an understanding of the decision analysis approach and its

potential applicability to complex decisions. Prerequisites are completion of course 110 or permission of the instructor.

121 MODELS FOR DEFENSE DECISIONMAKING
(Spring—second six weeks)

This intermediate course examines the utility of simple regression and forecasting models to aid decisionmaking in various policy areas. The policy areas covered include prediction of political instability in less developed countries, economic growth and military spending in those countries, and voting in Western democracies. The modeling techniques developed use multiple regression analysis and its application to time series data. The course entails several computer laboratory sessions utilizing various multiple regression programs. A politico-military data base is available for student use.

122 QUANTITATIVE METHODS IN ACQUISITION MANAGEMENT
(Spring—first six weeks)

This elective addresses key project planning and statistical methodologies proven useful in defense sector acquisition management. These techniques will be presented at a level of critical review sufficient for participants to become effective users of the techniques and evaluators of analyses based on them. Specific topics include project planning and control (PERT/CPM, time/cost trade-offs, resource balancing, and advanced network methods), statistical cost estimation (parametric costing models, cost estimating relationships), and essentials of quality control and reliability. Computer programs will provide students the opportunity to experiment with these quantitative tools.

123 FUNDAMENTALS OF RESEARCH DESIGN
(Fall-Spring—Foundation)

This foundation course teaches basic skills in the research process beginning with problem statements and hypothesis formulation. It then deals with the construction of operational definitions, scaling and tests of reliability, and validity of research variables. These concepts are useful in specifying pairs of research variables for hypothesis testing, simple regression, and the efficient design of sampling experiments. The concept of a third control variable is then introduced to permit the use of multiple regression analysis and tests of hypotheses. The course will utilize a computer laboratory containing politico-military data files and statistical analysis programs useful in the production of SSP's and MSP's.

124 MATHEMATICAL PROGRAMMING AND SIMULATION
(Spring—second six weeks)

This specialized elective examines the use of mathematical programming and simulation methodologies in defense sector analyses. Specific topics include linear and goal programming applications, and essentials of simulation including program structure, validation, and effective management of simulation efforts. The course includes hands-on exposure to the techniques presented and critiques of case studies.

125 MILITARY THEORY, MILITARY HISTORY, AND WAR GAMING
(Spring)

The purpose of this course is to show how the foundation of all significant military theory and doctrine for the past two centuries has been an understanding of the significance and relevance of military history as "the laboratory of the soldier." It is shown, through numerous examples from World War II and the Middle East wars, that the importance of this relationship has not declined in the day of sophisticated weapons incorporating modern technology but has if anything become even more important. The course establishes that computerized combat models and war games can contribute reliably to planning and doctrinal development in the future only if related to a coherent military theory grounded in historical experience. The current and continuing significance of the theoretical work of Karl von Clausewitz and J. F. C. Fuller is shown. The Qualified Judgment Model is discussed as an example of how a war game can be developed and validated from analysis of recent historical experience.

126 AUTOMATED INFORMATION SYSTEMS CONCEPT DEVELOPMENT AND DESIGN
(Spring)

The primary objective of this elective is to impart a sound understanding of analysis and design concepts so that functional and military managers can better direct and participate in the development of an automated information system and improve their communication with ADP personnel. The course is intended for the student whose future assignment will require a knowledge of how to define information requirements, analyze an existing system to determine its deficiencies, and design a system to solve information needs not being satisfied. It features lectures and discussions integrated into a case study. The case work is accomplished using the team concept. The course emphasizes structured analysis and design techniques, use of specific design methodologies, and system development tools.

127 WAR GAMING
(Spring)

This course provides a survey of war gaming in the Department of Defense. It begins by briefly tracing the history of games from the time of Sun Tzu to the present day. The terminology and methodology of war gaming are presented, and several class sessions are devoted to an examination of current use of games by the Army, Navy, Air Force, Marine Corps, and OJCS, for training and exercises, research and analysis, and planning and force structure applications. As an integral part of the course, students will participate in a theater-level joint-Service war game.

128 INFORMATION TRANSFER TECHNOLOGY
(Spring)

This course concentrates on the technology of information transfer. It provides the student with a working knowledge of the current technology of information input, transmission, and output, as well as the policy issues relevant to communications systems. Course content will include an introduction to telecommunications development and basic transmission technology, characteristics of telephone networks, basic networks, and

satellite communications. Management and policy issues covered include the structure and regulation of the U.S. telecommunications industry, communications security, command and control, and DOD management of communications. The course is designed for the student with little or no experience in dealing with high-technology information-handling systems.

129 MICROCOMPUTER APPLICATIONS
(Fall and Spring)

An intensive, hands-on foundation course which, using computers, will introduce students to selected computer applications of file management, electronic spread sheets, text processing, and telecommunications. While classroom content must include adequate coverage on mechanics of the system to allow the novice computer user to become proficient, lectures are intended to provide the student with an overview and appreciation of information resources management problems and applications in their future assignments. Budget limitations permitting, students will be issued microcomputers to use for the duration of the class. This course is complementary with course 115 and does not require it as a prerequisite.

EXECUTIVE DEVELOPMENT (150-159)

150 EXECUTIVE WRITING
(Fall and Spring)

The ability to write and edit effectively is an important element in the responsibilities of senior commanders, executives, and staff officers. It is possible—even in a bureaucracy—to write so that the recipient reads a message entirely, understands it, and dispassionately considers it. This is a course in practical writing as opposed to one in literary composition. Practical writing seeks to inform, instruct, or convince, rather than provide the reader with an aesthetic or emotional experience. First-rate practical writing and editing are skills that cannot be acquired in a hurry or without disciplined practice. Nevertheless, at the end of this course, the student should have substantial competence in putting thoughts on paper with greater clarity and coherence. The student should also be able to edit effectively.

155 EXECUTIVE HEALTH AND FITNESS
(Fall and Spring)

The role of health and fitness in a typical executive lifestyle is examined in this course. The primary objective of the course is to provide sufficient information to enable each student to develop a personalized exercise/dietary fitness program under professional supervision. In addition, attention is given to developing sound exercise programs for one's subordinates and colleagues in the military Services and civilian agencies. Course topics include coronary heart disease risk factors such as HDL and LDL cholesterol, hypertension, and smoking; body composition in determining optimal fat/lean body mass ratios; oxygen transport and utilization during aerobic and anaerobic work; exercise as a psychological adjunct in reducing stress; acute and chronic responses of the human body to exercise; energy cost of selected popular activities; and temperature regulation and acclimatization to exercising in hot and cold environments.

156 OPTIMIZING EXECUTIVE POTENTIAL
(Fall and Spring)

Employing the principles of psychocybernetics, psycholinguistics, and self-image awareness and development, this course explores the processes of motivation, change, and creativity in terms of their potential application to executive functions. This course utilizes the videotape series, "New Age Thinking," by Louis E. Tice, founder and president of the Pacific Institute, and consultant to numerous businesses, educational institutions, and professional athletic teams. It is for those who are interested in new concepts, self-examination, and experimental growth.

157 CREATIVE THOUGHT: AMERICAN LITERATURE AND WARFARE
(Fall and Spring)

This course analyzes timeless, thought-provoking, controversial works that have shaped the way Americans see themselves and the profession of arms—*Billy Budd* by Herman Melville, *The Caine Mutiny Court Martial* by Herman Wouk, *Catch-22* by Joseph Heller, *Fields of Fire* by James Webb, and selections from *Poems, 1957-1967* by James Dickey. The authors are five popular, influential writers with firsthand knowledge of the armed forces—Melville, one of the most significant novelists of the nineteenth century, whose critical thought about the Navy is an important part of his fiction; Wouk, Pulitzer Prize winner who spent three years on destroyer-minesweepers in the Pacific in World War II; Heller, B-25 bombadier whose first novel sold over 5 million copies; Webb, Marine company commander whose first book was called the best Vietnam war novel; Dickey, fighter pilot in World War II and Korea, and winner of the National Book Award in poetry. The course consists of seminar discussions of the works and their themes, supplemented with other materials such as the *Caine Mutiny* movie.

INDUSTRIAL COLLEGE OF THE ARMED FORCES
ELECTIVE COURSE DESCRIPTIONS

DEFENSE, ECONOMICS, AND ENVIRONMENT ANALYSIS (200-239)

ECONOMICS (200-210)

200 ECONOMICS: PRINCIPLES AND POLICY
(Fall)

This course is a study of economic principles, applications, and policy. Contemporary microeconomic and macroeconomic theories and their applications for decisionmaking are reviewed. Emphasis is placed on the institutional structure of the U.S. economy, resource constraints, market structure, national income determination, economic stabilization, and production and economic forecasting. Course exploration of economic principles, analytical processes, and policy evaluation is designed to delineate crucial economic issues and evaluate policy alternatives that bear upon national security. The material taught in this course reinforces and introduces concepts additional to those presented in the economics survey course conducted during Phase I.

201 MANAGERIAL ECONOMICS
(Fall)

This course deals with the major principles of contemporary economics as they relate to government and private sector decisionmaking. Special emphasis is placed on the application of economic theories and on the uses of both qualitative and quantitative methods to solve problems in government and industry. Topical areas examined include demand analysis, economic forecasting, productivity, investment and capital budgeting analysis, pricing behavior of firms, and antitrust impacts on resource allocation.

202 ECONOMIC LEVERAGE: FROM SANCTIONS TO WARFARE
(Fall)

This course investigates the theory and practice of economic leverage, from trade pressure to economic warfare during periods of conflict. Topics include the theories of international trade, economic imperialism, and the economic dimension of warfare and will be illustrated with case studies in economic leverage.

203 FISCAL POLICY AND NATIONAL SECURITY
(Fall and Spring)

This course examines contemporary economic theory, concepts, and analytical techniques of fiscal policies that guide the economy toward achieving national economic goals and national security objectives. In addition, the major fiscal functions performed by public institutions within a private enterprise-oriented economy are studied in depth. Tax and

expenditure patterns are analyzed to identify their impact on the allocation of resources, and their effect on economic efficiency and growth. Also, the importance of fiscal coordination for international economic stabilization and growth is examined. Student preparation and reporting on cases in selected areas of public finance are expected.

204 MONETARY POLICY AND NATIONAL SECURITY
(Fall and Spring)

This course considers contemporary monetary theory and the historical development of monetary policy as they affect national security. Monetary policy decisions, vital to the stability of the U.S. economy during times of peace or war, and their impact on international economic activities and national security are emphasized. Topical areas include monetary and income theory, stagflation, financial markets, the monetary-fiscal debate, role and policies of the Federal Reserve Banks, debt management, linkage of domestic and international money markets, and money as a strategic resource.

205 COMPARATIVE ECONOMIC SYSTEMS
(Spring)

This course examines alternative forms of economic organization, employing methodologies and techniques appropriate to the evaluation of system performances and relative strengths and weaknesses. It is designed to provide the knowledge, perspective, and analytical skills necessary for executive decisionmaking on national security policy and for economic policy evaluation. Emphasis is given to the role and impact of national security endeavors and to how economic structures impact upon defense efforts. The economic performance of the USSR also is given special emphasis. An introduction to comparative system theory is followed by in-depth study of capitalism, social democratic systems, the COMECON economies, socialist market economics, fascist systems, and communism.

206 THE U.S. AND THE DEVELOPING WORLD
(Fall and Spring)

This course is an examination of factors in the development of the Third and Fourth Worlds that are relevant to U.S. economic, political, and security interests. Topics include the evolution of development theories and policies in the past thirty years, the complex economic-social-political nature of development, commodity export dependency and the particular case of oil, and the impact of the present international economic system on development. Issues in the North-South debate on a new international economic order will be examined critically. Guest speakers will lead discussions of key questions of the international environment for development. The course concludes with a series of short student-led seminars on topics related to development.

207 INTERNATIONAL STRATEGIC ECONOMICS
(Fall and Spring)

This course develops major themes of political economy with emphasis on national security implications of the world economic system, especially the upheaval and changing characteristics of today's environment. It examines trade, and financial and developmental relationships that link the United

States with other members of the world economy. Topical areas include the world economy and the United States, economic strength of the industrial democracies vs. directed economies, the international monetary system, multinational corporations, North-South issues, and East-West trade.

208 INTERNATIONAL FINANCIAL INSTITUTIONS AND PROCESSES
(Spring)

This course provides a theoretical treatment of international economics and national economic policymaking. It examines the international institutions, processes, and effects of international financial transactions. The focus is global and utilizes a rigorous approach to international financial issues. Issues analyzed and evaluated include fixed exchange rates vs. managed float, arbitrage and speculation, Eurodollar and Eurocurrency markets, intervention problems, multinational debt, technology transfer and comparative advantages, and international and national economic policy interaction. Students are expected to report individual findings on a selected research topic.

209 POLITICAL ECONOMY OF SOCIAL ISSUES
(Spring)

This course is a study of the economic dimensions of selected social issues in the United States having relevance to the Armed Forces. In a setting of increased competition for resources between defense activities and domestic social programs, this course examines the resource implications of poverty, discrimination, health care, and pollution control. Comparisons are made of alternative policy options currently being considered for helping the poor, caring for the sick, and combatting pollution. The ramified effects on the military Services of some current and prospective initiatives in these areas are addressed.

210 ECONOMIC INTELLIGENCE
(Spring)

This course is designed to provide definitive insights into the unique contribution of economic intelligence to policy formulation as related to the management of resources for national security. The competition for raw materials, energy, technology, and access to markets is evaluated. In addition, the course provides insights into the functioning of various elements of the intelligence community in the economic field. Technical and policy issues relating to the refinement of the existing system for producing economic intelligence are examined in terms of the current capabilities of the economic sciences.

211 MACROECONOMIC MODELS AND POLICIES
(Spring)

This course introduces students to a number of econometric models which are useful in analyzing alternative government and monetary policies. The effects of defense spending on various economic sectors will be analyzed in detail. Topics to be covered include the economic structure implicit in the models, the effects of alternative policies, and methods for evaluating these models. Students will conduct hands-on simulation runs of the various models.

PUBLIC ADMINISTRATION (220-229)

220 THE FEDERAL BUDGET PROCESS
(Fall and Spring)

This course involves the study of Federal budgeting concepts and their relationship to the budget process. It provides an executive-level understanding of agency and departmental budget formulation under Office of Management and Budget (OMB) guidelines. Additional topics include the OMB review leading to the President's budget, congressional hearings, appropriation and expenditure controls, budget execution, and the latest practical applications within the Federal Government.

221 THE AMERICAN PRESIDENCY: A COMPARATIVE ASSESSMENT OF OFFICE AND POWERS
(Fall and Spring)

This course consists of an historical and comparative examination of the evolution of the Office of President and its structure and powers from the Philadelphia Convention of 1787 to the present. Beginning with an examination of the political theories which shaped the Office of President, the course will survey the various roles and functions performed by the President, the factors contributing to the growth and contraction of presidential power, the system of presidential selection and tenure of office, the relations of the President with Congress and the Supreme Court, the interaction between the President and the National Security Council, and the impact of the President's decisions on the economy. Guest speakers from the White House and academia will be invited and a research paper will be required.

222 LAW FOR THE DEFENSE MANAGER
(Spring)

This course presents specific areas of the legal field that the defense manager may encounter. It provides students the opportunity to appreciate the legal process associated with identifying and solving legal problems. It also stresses the importance of legal review in the decision-making process. Among the topics covered are installation management law, laws of warfare, legal aspects of public sector labor-management relations, standards of conduct, Federal acquisition law with emphasis on contract disputes and appeals, judicial review of military administrative actions, and recent developments in military criminal law. The course is intended for those possessing little or no formal background in procurement and/or business law.

NATIONAL SECURITY POLICY (230-238)

230 TECHNOLOGY AND THE ART OF WAR
(Fall)

An examination of the effects of military technology on the way armed forces plan and conduct military actions. Emphasis is on changes in military organizations, logisitics, and combat operations. This course discusses the technological dimensions in terms of both deterrence and warfighting. It

provides an historical perspective as well as an analysis of current problems and issues associated with the introduction of new weapons and military equipment. Focus is on the links between the products of research and development and their battlefield utilization.

231 MODERN STRATEGIC THOUGHT AND RESOURCE MANAGEMENT
(Spring)

This course presents concepts and doctrines applicable to strategic, theater nuclear, and conventional forces; an examination of the competing demands on, and resource requirements for, such forces; a study of how to orchestrate military resources to achieve a desired set of objectives; and an analysis of acquisition policy factors in view of constraints on the defense budget; potential types of war; the direction of our foreign policy; the revolution in conventional war technology; geopolitical, strategic, and threat considerations; domestic perceptions about the necessity of defense; and the changing force structure size, missions, and organizations of the military Services.

232 GLOBAL RESOURCES AND NATIONAL SECURITY POLICY
(Fall)

This course examines selected global resources, technologies, and issues that bear on U.S. national security policy such as exploitation of seabed minerals, use and control of nuclear technology, and international commodity agreements. It addresses the geography, politics, and economics of these global phenomena, and methods of conceptualization, analysis, and synthesis. Members of the seminar group are expected to design, explore, and critically assess U.S. policy options and evaluative criteria that bear upon the topics selected for intensive study.

233 FUNDAMENTAL IDEAS: CLASSICAL READINGS IN POLITICAL THOUGHT
(Fall)

This course provides an opportunity for the development of greater depth and historical perspective in selected areas of study relating to U.S. national interests and security. Students read from a preselected list of books including Tocqueville's *Democracy in America*, Machiavelli's *The Prince*, and *The Federalist Papers*, and analyze the inherent contributions made by these classics, which have remained relevant over the years and are very much a part of contemporary thinking. Students read and then discuss the books with peers and ICAF faculty.

234 FUNDAMENTAL IDEAS: CLASSICAL READINGS IN MILITARY THOUGHT
(Spring)

This course provides an opportunity for the development of greater depth and historical perspective in selected areas of study relating to U.S. national interests and security. Students read from a preselected list of books including Sun Tzu's *The Art of War*, Mahan's *The Influence of Seapower Upon History*, and Clausewitz's *On War*, and analyze the inherent contributions made by these classics, which have remained relevant over the years and are very much a part of contemporary thinking. Students will read

and then discuss the books with peers and ICAF faculty.

236 RESOURCE MANAGEMENT: PERSIAN GULF REALITIES AND U.S. POLICY
(Spring)

This course surveys the resources of the Persian Gulf region. It provides insights into the economic, cultural, and historical factors that underlie decisions by the countries bordering on the Gulf, and at the same time serve as constraints on U.S. policy options there. Topics include the vital petroleum industry, economic sector development, the demographic mix and its implications for modernization, Saudi Arabia's unique roles, and the evolution of U.S. concerns and approaches. Attention is given to wider Middle East and superpower considerations as they impact upon Gulf resources and policies.

237 THE COMMANDER AND THE MEDIA
(Fall and Spring) (half-credit)

Through a combination of instruction and extensive practical exercises, this course increases personal skills for dealing with media representatives. Students assume the role of a commander in several ongoing case study scenarios, meeting press and television reporters in various situations, and reviewing their performances via videotape recordings under professional guidance. The course may be matched with another half-credit offering to achieve full credit, or taken as an overload course since there are no homework requirements.

238 MEDIA TECHNIQUES
(Spring) (half-credit)

This course is designed as a follow-on for *The Commander and the Media*, but, with the instructor's permission, may be taken without having completed *The Commander and the Media*. It provides additional practical work (television studio interview), includes student reports and discussion, and features a military public affairs official and a representative of the media as guest speakers.

DEFENSE MANPOWER AND EXECUTIVE DEVELOPMENT STUDIES (240-245)

MANPOWER MANAGEMENT (240-245)

240 LABOR-MANAGEMENT RELATIONS
(Fall)

This course provides an examination of the nature of labor unions, their place in society, and their effects on business operations in both the private and public sectors. Issues relating to unionism and national security management are particularly highlighted. It focuses on the dynamics of labor relations in collective bargaining.

241 MILITARY FAMILY STUDIES
(Fall)

This course examines current research on military families and the impact of policies on them. The correlation between the readiness and retention of military personnel and their families' satisfaction with military life is of concern for all military leaders today. Areas of investigation will include the provision and effectiveness of support services; the cause and effect of isolation experienced by military families; the impact of deployment, separated duty, moving, and overseas duty on the entire family; potential roles for military spouses; and the leader's role in support of the families of personnel in his or her command.

242 ANATOMY OF MILITARY LEADERSHIP: IMAGES AND REFLECTIONS
(Spring)

This course presents the major theories and concepts drawn from the field of behavioral science which relate to military leadership in the contemporary social environment. It provides an opportunity for students to analyze those factors which have contributed to developing effective leadership models during times of war and during peacetime. Several retired flag officers and civilians serve as distinguished expert guest panelists. They provide us with their perspective and viewpoints concerning the successful application of the theoretical models of leadership by U.S. leaders during World War II, Korea, and Vietnam. Students are also prompted to make comparisons between U.S. and Soviet perceptions of leadership. Each student is required to write a paper critically analyzing a contempory application of leadership in the U.S. military.

243 CREATIVITY: CONCEPTS AND IMPLEMENTATION
(Fall)

This course seeks to bring attention to creativity (new and useful alternatives for meeting old and new problems), the role innovation can play in recognizing and grasping the opportunities that continually face large industrial and bureaucratic organizations, and the importance of understanding the creative process, the creative person, the creative product, and the situation ripe for innovation. This course seeks to explore the latest frontiers of the creative individual, the creative group, the creative organization, and creative leadership. The purpose of this course is to provide a forum to discuss new approaches in applied creativity. The course will focus on the mechanics of creativity, the management of innovation, the recognition of personal and organizational inhibitors of creative thinking, and the understanding of varied creative development technologies.

244 CONTEMPORARY AFFAIRS AND ISSUES PANEL
(Spring)

The National Defense University (NDU) Contemporary Affairs and Issues Panel is designed to encourage a dialogue concerning national security matters of current mutual interest to NDU students, the civilian academic community, and selected special interest groups (i.e., antinuclear, environmental, disarmament). Opportunities to meet with the various groups will be arranged through campus appearances, guest speaker sessions, and classroom visits by selected panel members. As current defense

issues are identified, the discussion will develop around such topics as national strategy, military posture, global and regional interests, the volunteer Armed Forces, social matters within the Armed Forces, material and budgetary concerns, and issues raised by the visiting group.

245 PRODUCTIVITY IN ORGANIZATIONS
(Fall)

This course will survey a broad range of theories, concepts, and techniques pertaining to the improvement of productivity within organizations. The course will begin with a survey of several theories of motivation to include those of Taylor, Maslow, Herzberg, McClelland, and Skinner. Next will follow an examination of various approaches to improving productivity to include organizational development, quality circles, computer-assisted design and computer-assisted manufacturing, and robotics and office automation. The course will focus on the potential value of expanded application of these concepts within the Federal Government and defense industry.

DEFENSE MATERIEL AND SYSTEMS MANAGEMENT STUDIES (260-281)

DEFENSE MANAGEMENT SYSTEMS (260-269)

260 ISSUES IN SYSTEMS ACQUISITION
(Fall) (half-credit)

This course is designed for the student with experience in DOD systems acquisition at the program or staff level. Current issues acting upon the acquisition process will be discussed, including the DOD acquisition improvement program, multiyear contracting, and programming and budgeting techniques. The course provides an appreciation of the latest concepts in systems acquisition management and future issues.

261 DEFENSE SYSTEMS ACQUISITION
(Fall) (half-credit)

This course provides detailed knowledge of the formalized systems acquisition process and its underlying philosophies, concepts, and its application in the Department of Defense. Topics covered include the evaluation of systems acquisitions management, the systems approach, the systems life-cycle, defense systems acquisition cycle, user-producer acquisition management disciplines and activities, techniques of defense project management, and major problems and issues associated with the acquisition process.

262 DEFENSE CONTRACTING
(Spring)

Designed primarily for the student who has had little or no experience in the world of defense contracting. Students become familiar with the major policies guiding defense procurement, and develop a knowledge of the concepts, principles, language, and functions involved in defense contracting. Current problems and issues will be addressed.

265 STRATEGIC MOBILITY: ISSUES AND PERSPECTIVES
(Fall) (half-credit)

This course provides an overview of the major issues affecting strategic mobility. It assesses the status of service programs designed to overcome shortfalls. Emphasis is placed upon the ability to deploy and sustain forces in the NATO area and the Middle East. The goal is to acquaint the student with the size of the mobility requirement, the current mobility capability, and the adequacy of existing improvement programs.

RESOURCE MANAGEMENT POLICY (270-274)

270 FINANCIAL MANAGEMENT
(Fall and Spring)

This course provides an understanding of the financial management systems utilized to control industrial and bureaucratic organizations. It is specifically designed to help the public-sector manager understand the financial orientation of the industrial manager. Students analyze financial reporting practices in order to comprehend fully the capacity of industry to support DOD requirements for weapons systems, commodities, and services under peacetime and wartime conditions.

271 THE PLANNING, PROGRAMMING, AND BUDGETING SYSTEM
(Spring) (half-credit)

This course is an in-depth inquiry into the planning, programming, and budgeting system (PPBS) in the Department of Defense. Areas covered are how national security policy is translated into military requirements; the use of systematic analysis to make choices; and the values, roles, and institutions related to PPBS. Participants will be provided with the basic tools with which they may operate at an executive level in the PPBS environment.

272 GOVERNMENT AND INDUSTRY RELATIONS
(Fall and Spring)

A study of the policies associated with the power of the Federal Government to regulate and promote industry. Topics covered include the constitutional powers of the Federal Government to regulate industry, the evolution of these powers through legislation and judicial interpretation, antitrust law, administrative regulation of business, protection of business, the impact of antitrust and regulatory enforcement on defense contractors, the resultant effect on mobilization and surge capability, and alternatives to present policies and programs.

274 LOGISTICS MANAGEMENT: ISSUES AND PERSPECTIVES
(Spring)

An executive-level study of logistics as it is practiced within DOD. It emphasizes the joint approach, but it also treats logistics issues within the Services. Selected logistics practitioners within DOD present current logistics issues affecting their agencies, and discuss command and managerial actions being taken to resolve these issues. Individual logistics

topics are chosen to provide coverage across the spectrum of the logistics function.

DEFENSE MOBILIZATION AND PLANNING POLICY (281-289)

281 STRATEGIC INDUSTRIAL INTERDEPENDENCE AND NATIONAL SECURITY
(Fall)

This course examines the interdependent linkages among basic industries of the United States and various nations vital to U.S. national security. It explores supply and demand relationships, the impact of foreign governmental protectionism, national restrictions, and subsidy policies on U.S. industries. Students develop strategic analyses, tracing the flow of products from sources of basic raw materials to finished goods, to determine the possible vulnerability to interruption or bottlenecks. It includes an examination of national policy, the methods used in projecting defense requirements for materiel, stockpiling, the process by which these policies are formulated, with special emphasis on the interdependence between DOD, other Federal agencies, and the private sector; and an examination of the issues and alternatives for varying wartime scenarios to improve the industrial readiness of the Nation. In addition, industrial preparedness planning and other critical issues in mobilization will be examined.

NATIONAL WAR COLLEGE
ELECTIVE COURSE DESCRIPTIONS

INTERNATIONAL POLITICS AND ECONOMICS (300-319)

301 DIPLOMACY OF INFLUENCE: THE MANAGEMENT OF PERCEPTIONS
(Fall)

An examination of the psychological dimension of the instruments of statecraft and the importance of the management of perceptions to the conduct of foreign relations and the use of military power. The course includes consideration of the relevance of psychological and communications theories to the design of strategies, plans, programs, and techniques for perception management, as well as an analysis of how other countries manage perceptions as an instrument for influence.

302 INTERNATIONAL ISSUES IN LAW AND POLICY
(Spring)

An examination of selected issues in international law and policy, e.g., the uses of outer space, law of armed conflict, law of the sea, human rights, terrorism and counterterrorism, a new international economic order, etc. The focus of the course is on the nature of the issues, their implications for international law and national policy, and approaches to their resolution.

303 NEGOTIATING PRINCIPLES AND PRACTICES
(Fall)

An examination of negotiating principles and practices; their application in different negotiating styles with emphasis on the differences between Soviet and U.S. approaches; and the role of negotiations in diplomacy and developing national security policy. The focus of the course will be on the design of negotiating strategies and the conduct of negotiations.

304 OUTER SPACE: PEACEFUL AND MILITARY APPLICATIONS
(Spring)

The purpose of this course is to provide background with respect to the policy of the United States and other states associated with activities in outer space. The policies of all states extend into their military and peaceful activities. Moreover, these activities are interrelated and interdependent because the technologies needed for outer space—for launching, orbiting, and maneuvering space objects—do not differ substantially for military or peaceful purposes. Because outer space is perceived as a major arena associated with the security of nations and of efforts they devote to self-defense, the military efforts of the United States, its friends, and adversaries are emphasized.

305 PROCESS OF CHANGE AND FOREIGN POLICY
(Fall)

An examination of the relationship between foreign policy and the process of change in selected countries of interest to the United States. The course will focus particularly on situations of rapid change or severe instability, other countries' responses to them, and on the types of pressures generated for U.S. policy responses. Case studies will be used to illustrate problems of policy and perspectives involved in coping with rapid-change situations or in attempting to defer sought-after changes. The merits of alternative policy approaches will be analyzed to identify common principles potentially applicable to future modernization, economic and social development, or sharp change in political situations.

306A-B TRANSNATIONAL ISSUES
(Fall and Spring)

An examination of critical selected transnational issues, such as population growth, food and hunger, health and education, energy and other natural-resource demands, cross-border ecological problems, refugees, etc. Special attention will be given to the requirements for alleviating the impact of these problems and to the design of policies and programs to meet these requirements.

307 STRATEGIC IMPORTANCE OF THE MEDITERRANEAN BASIN
(Spring)

This course will examine the Mediterranean Basin in terms of the littoral states, sea and air routes of communication, law of the sea, and seapower. Historical relationships and present-day conflicts will be analyzed, such as those involving Greece, Turkey, and Cyprus, and Spain and Great Britain. Rights of navigation in the Strait of Gibraltar, the Turkish Straits, and the Suez Canal will be examined. The importance and limitations of seapower, and of conflict, and their impact on U.S. national security interests will be projected from now until the end of the century.

DEFENSE POLICY, STRATEGY, AND PLANNING (320-339)

320 STRATEGIC THOUGHT BEFORE THE NUCLEAR AGE
(Fall)

An examination of strategic thinkers and their ideas in the prenuclear age. The focus of the course will be on those writers who significantly influenced the evolution of land, sea, and air strategy, tactics, and doctrine. Particular emphasis will be placed on the ideas and influence of Clausewitz.

321 ART OF WAR FROM ALEXANDER THE GREAT TO MOLTKE THE ELDER
(Fall)

An examination of warfare from ancient times to the eve of the modern era. The focus of the course will be on the complex relationship between war and society over two millennia and the successes of the great captains of war.

322 ART OF WAR IN THE TWENTIETH CENTURY
(Spring)

An examination of war and its conduct in the twentieth century. The focus of the course will be on the role of the military leader, the impact of technology on warfare, the evolution of military doctrine, the development of airpower and seapower, and the implication of the lower levels of conflict such as insurgency for the use of military power and the conduct of war.

323A-B APPROACHES TO STRATEGY AND STRATEGIC ANALYSIS
(Fall and Spring)

An examination of strategy as a discipline or field of interest. The focus of the course will be on various theories and concepts of strategy, qualitative and quantitative approaches to strategic analysis, and the logical and conceptual requirements fundamental to strategy development.

324 ARMS CONTROL AND NATIONAL SECURITY
(Fall)

An examination of arms control as an element in national security policy and strategy. The course will focus on arms control as a means and as an end with special emphasis on the lessons to be learned from selected arms control negotiations, e.g., START, SALT, MBFR, Nuclear Test Ban, incidents at sea, and others, and on the prospects for arms control.

325 ETHICS, THE PUBLIC SERVANT, AND WAR
(Fall)

An examination of public service and war from the moral and ethical perspective. The focus of the course will be on the application of principles and lessons learned to current moral challenges and ethical issues for the public servant. The course will also focus on the use of force, its control and expansion, from a moral and ethical perspective.

326 INTELLIGENCE AND NATIONAL SECURITY
(Spring)

An examination of the structure of the U.S. intelligence community, its development, and the functioning of the requirements, tasking, collection, production, and exploitation phases of the intelligence cycle. The focus of the course will be on the role of intelligence in decisionmaking and the problem of changing and competing intelligence requirements.

327 INSURGENCY, REVOLUTION, AND TERRORISM
(Fall)

A systematic comparative examination of contemporary insurgency, revolution, and terrorism. The course will focus on theories of revolution and the use of terror, types of insurgency, variables that have a major impact on the progression and outcome of insurgencies and terrorist incidents, and strategic approaches for dealing with their consequences.

329 NATO: THE MILITARY PERSPECTIVE
(Spring)

An examination of NATO's history, organizational structure, capabilities, and strategy. The major emphasis will be placed on NATO's military

strategy, its strengths, weaknesses, constraints, and reinforcement and employment issues. The course also includes an assessment of the capabilities of the Warsaw Pact and the nature of the threat it poses.

330 NAVAL STRATEGY
(Spring)

The objective of this course is to increase students' understanding of what navies do, their strengths and limitations, as well as the conditions which affect their use. The course will look primarily at the U.S. and Soviet Navies' missions and ask to what extent they reflect national policy. Warfighting strategy and weapons acquisition strategy will be examined for relevance, appreciation of reality, and effectiveness.

331 STRATEGIC PLANNING: STRATEGY AND FORCE PLANNING
(Fall)

An examination of force planning principles and practices, and the relationship of strategy and strategy development to force planning. The focus of the course will be on the Services' medium-term and longer-term force development planning, how the Services' practices relate to joint force sizing and force design requirements, their impact on strategy, and the problems of capabilities and risk assessment.

332 JOINT AND COMBINED OPERATIONS
(Spring)

An examination of the requirements for developing force application strategies and planning for the conduct of joint and combined operations. The focus of the course will be on contingency and force employment planning at the Joint Chiefs of Staff and theater commander levels. Prerequisite is either Military Strategy and Operations, or Strategic Planning: Strategy and Force Planning.

334 STRATEGIC THOUGHT IN THE NUCLEAR AGE
(Spring)

An examination of critical current and potential political-military issues and problem areas by exploring the ideas of modern strategic thinkers and writers. The course will focus on all magnitudes of potential conflict from the strategic nuclear to the lower levels such as insurgency and terrorism.

335 TECHNOLOGY AND MILITARY STRATEGY
(Fall)

An examination of the relationship of technology and military strategy. Utilizing historical, analytical, and case study methods, the course will focus on the influence of technology on strategy and their interaction. Emphasis will be given to the role played by the various public and private sector components of the defense community.

337 WHY HUMAN WARFARE—THE CAUSES OF WAR
(Fall)

The objective of this course is to develop an understanding of the various approaches to the problem of human conflict, to become familiar with the

latest research into the causes of war, and to develop an understanding of how the causes of war might affect crisis management in international affairs and strategic thinking.

338 ISSUES IN THE POLITICAL USE OF MILITARY POWER
(Spring)

An examination of a number of critical issues in the political use of military power. The political use of military power will be defined as that in which the objective is other than the defeat of an enemy, e.g., it will include the threat or application of military force to influence the behavior of other states. The issues will be explored through theoretical readings as well as case studies.

FOREIGN AREA AND COMPARATIVE DEFENSE STUDIES (340-359)

341 AFRICA SOUTH OF THE SAHARA
(Spring)

An examination of key regions and countries and U.S. interests in Sub-Saharan Africa. The focus of the course will be on the nature of U.S. interests in the region, factors influencing regional states' domestic, foreign, and defense policies, the implications of these policies for U.S. interests, and U.S. policy requirements.

342 ARMED FORCES OF THE SOVIET UNION
(Fall)

An examination of the historical roots of the Soviet armed forces, their evolution, structure, equipment, roles, and missions. Particular attention will be given to the economic and demographic base of the armed forces and their relationship to the Soviet leadership and Soviet society.

343 SOVIET MILITARY DOCTRINE, STRATEGY, AND OPERATIONS
(Spring)

An examination of Soviet military thought, strategic nuclear, naval, air, and combined arms doctrine and strategy. Emphasis will be placed on the Soviet approach to nuclear deterrence and war, and to the Soviet conceptual framework for the employment of armed forces within a theater of operations. Prerequisite: Armed Forces of the Soviet Union.

344 COMPARATIVE DEFENSE POLICY AND STRATEGY
(Spring)

A systematic comparative examination of the defense policies and strategies of selected countries critical to U.S. security interests. The course will focus on the content of defense policies and strategies, factors influencing their development, and the processes of defense decisionmaking.

345 CONTEMPORARY MIDDLE EAST AND NORTH AFRICA: CONFLICT AND COMPETITION
(Spring)

An examination of patterns of conflict and competition in the Middle East and North Africa. The focus of the course will be on intrastate and intraregional conflict and competition, their extraregional implications, and the influence of extraregional conflict and competition in the region.

347 EASTERN EUROPE AND U.S. INTERESTS
(Spring)

An examination of selected developments in Eastern Europe since World War II and the implications of these developments for U.S. policy. The course will focus on the domestic, foreign, and defense policies of Eastern European states, their bilateral relations with the USSR and the United States, and the role of Soviet-dominated multilateral regional organizations. Particular attention will be given to East European deviations from the Soviet model and their implication for U.S. interests.

348-A LATIN AMERICA AND U.S. INTERESTS
(Fall and Spring)

An examination of the subregions, selected countries, and U.S. interests in Latin America. The focus of the course will be on the nature of U.S. interests in the region, factors influencing regional states' domestic, foreign, and defense policies, the implications of these policies for U.S. interests, and U.S. policy requirements.

349 NORTHEAST ASIA AND U.S. INTERESTS
(Spring)

An examination of Northeast Asia and U.S. interests. The focus of the course will be on the nature of U.S. interests in the region, factors influencing regional states' domestic, foreign, and defense policies, the implications of these policies for U.S. interests, and U.S. policy requirements. Particular attention will be devoted to Soviet interests and influence in the region and to Japan's role and policies.

350 PEOPLE'S REPUBLIC OF CHINA
(Spring)

An introduction to the People's Republic of China (PRC) and its domestic, foreign, and defense policy. The focus of the course will be on the nature of U.S. interests as they relate to the People's Republic, factors influencing the PRC's domestic, foreign, and defense policy, and their implications for U.S. interests, and U.S. policy requirements. Particular attention will be devoted to the Sino-Soviet conflict.

351 SOUTH AND SOUTHEAST ASIA AND U.S. INTERESTS
(Fall)

An examination of the subregions, selected countries, and U.S. interests in South and Southeast Asia. The focus of the course will be on the nature of U.S. interests, factors influencing regional states' domestic, foreign, and defense policies, and the implications of these policies for U.S. interests and U.S. policy requirements. Particular attention will be paid to Australia, Vietnam, India, and ASEAN.

352 THE SOVIET UNION: DOMESTIC FACTORS
(Fall)

An examination of the political system of the Soviet Union and its operation. The focus of the course will be on the party and the Soviet political system, Soviet domestic policies, and factors influencing their development. Particular attention will be paid to Soviet domestic problems, efforts to resolve them, and their implications for U.S. policy.

353 THE SOVIET UNION: FOREIGN POLICY
(Spring)

An examination of current Soviet foreign policy. The focus of the course will be on the content of current Soviet foreign policy, factors influencing its development, and the policy formulation process. Particular emphasis will be given to the Soviets' conduct of diplomacy and to the implications of Soviet policies for U.S. interests.

354 WESTERN EUROPE AND U.S. INTERESTS
(Spring)

An issue-oriented examination of U.S.-West European relations. The focus of the course will be on issues arising out of European political and economic developments, NATO and the Atlantic Alliance, the European Communities, the factors that influence them, and their implications for U.S. security interests and policy.

U.S. POLICIES, DOMESTIC PROCESSES, AND POLICY FORMULATION (360-369)

361 BUDGETARY THEORY, LAW, AND POLITICS
(Spring)

An interdisciplinary examination of budgetary politics and theory. The focus of the course will be on the planning, programming, and budgeting system and the development of the defense budget and its processing in the Congress.

362 COMMUNICATION, INFORMATION, THE MEDIA, AND NATIONAL SECURITY
(Fall)

An examination of the various media, their role, and how they affect public opinion and policy formulation and implementation. The course will include discussions with commentators, reporters, broadcasters, publishers, and government officials. Particular emphasis will be devoted to the role and conduct of public affairs activities.

364 CREATIVITY AND INNOVATION
(Fall)

An introduction to the nature, role, and cultivation of creative thinking and innovation. The focus of the course will be to encourage innovative approaches to policy and strategy and to provide the opportunity to think creatively.

365 MILITARY PARTICIPATION IN NATIONAL SECURITY DECISIONMAKING: THE JCS AND UNIFIED COMMANDS
(Fall)

An examination of the nature and substance of the U.S. system for providing military advice to the national command authorities. The focus of the course will be on the current military role in national security decisionmaking, its strengths and weaknesses, and prospects for change.

366 NATIONAL SECURITY POLICY FORMULATION: PROCESS AND ORGANIZATION
(Fall)

An examination of the U.S. national security policy process. The focus of the course will be on the executive branch role, its organizational and bureaucratic influences, and executive-legislative relations in selected functional areas.

367 PATTERNS IN AMERICAN DIPLOMACY: U.S. SECURITY COMMITMENTS

An examination of the history of American policymakers' efforts since 1778 to maintain U.S. security through both freedom of action and commitment. The focus of the course will be on identification of trends and recurring patterns in thinking about security commitments, the ways in which commitments have been acquired and terminated, and their implications for policy.

368 PATTERNS OF AMERICAN DIPLOMACY: DECISIONS FOR WAR
(Spring)

An examination of American decisions for war. The focus of the course will be on the policy relevance of similarities and differences in past decisions for war with particular attention to the views of key executive and legislative branch decisionmakers.

369 THE PRESIDENCY AND NATIONAL SECURITY
(Spring)

An examination of the constitutional delegated authority and "shared powers" of the executive branch in domestic and foreign policy. The course will focus on the prevailing partnership in the American political system and will detail the programmatic and executive functions of domestic and foreign policy, highlighting the advisory systems, planning and budgetary processes, and execution mechanisms.

370 CONGRESS AND NATIONAL SECURITY
(Spring)

This course emphasizes the distinctive characteristics of Congress as a political institution, and examines how these traits impact on national security policy formulation. It will cover structural aspects (committees, party organizations, procedures, the budget process), decisionmaking, policy relationships, and major issues. The purpose of the course is to learn about and experience the congressional environment. For fall of 1984, special attention will be devoted to the congressional elections.

ANNEX C

Students at the Norfolk campus have the benefit of being part of an inter-Service, international student body. Additionally, the Norfolk metropolitan area affords convenient visits to numerous military and government installations, educational institutions, and cultural and recreational facilities.

A full spectrum of activities is designed to offer students and their families a variety of rewarding experiences. Students, staff, and faculty at the Staff College are automatically members of the AFSC Officers' Club. No dues are charged. The AFSC Women's Club sponsors a complete social, craft, and recreational activities program, including a welcome coffee and periodic luncheons. Youth activities, which are supervised with the assistance of parents, students, staff, and faculty, include Brownie and Girl Scouts, Cub and Boy Scouts, Junior Rifle Club, Judo Club, Bowling, Youth Soccer, and Teen Club.

A year-round program of athletic activities is conducted for students, staff, faculty, and families. The college organizes leagues made up of seminar teams for volleyball, softball, and bowling, plus tournaments for individual sports such as tennis, handball, and golf. AFSC also sponsors athletic awards programs to recognize excellence in badminton, bowling, golf, handball, racquetball, softball, squash, table tennis, and volleyball.

The Guest Speaker Program provides instruction not available through other forums. As is the policy throughout the University, guest lecturers are encouraged to present their views in an environment of academic freedom and responsible intellectual inquiry. Students have the opportunity for closer contact with the visitors through question-and-answer periods and luncheons.

Students at the Norfolk campus may sharpen their verbal skills by entering the college speaking contest. In addition, authors of research reports, military essays, and case studies whose papers are selected as the best in each category are appropriately recognized at graduation.

The following elective courses supplement the Core Program and complete the student's academic experience at the Armed Forces Staff College:

ARMED FORCES STAFF COLLEGE
ELECTIVE COURSE DESCRIPTIONS

ADVANCED COMPOSITION SEMINAR (7S01)

This seminar is designed to improve the writing skills that are essential for personal development and career advancement. It covers approximately the content of a one-semester, upper-level advanced composition course, including some review of basic principles of English grammar, punctuation, usage, thesis selection, and organization. Several papers are assigned, ranging in length from one paragraph to several pages, and each written assignment is critically evaluated at a private conference with the instructor. Particular emphasis is placed on the Major Writing Exercise; students receive instruction and feedback on every stage of the composition.

ARMS CONTROL AND THE MILITARY PLANNER (7S02)

The day has passed when the military planner could reject all arms control and disarmament (AC&D) efforts as basically unmilitary and not worthy of consideration. This course provides the student an understanding of this reality and the possible AC&D-related actions to consider in future assignments. The course covers AC&D development from historical origins to the present, with emphasis on the relationship to current international politics and military implications. The potential impact of future AC&D negotiations and the strategies and objectives of nuclear warfare are also discussed. The elective is organized into lectures with discussion periods.

THE COMMANDER AND THE MEDIA SEMINAR (7S03)

Experience is the best teacher for dealing with the news media. The student receives that experience playing the role of a commander in a number of typical and realistic news interview situations. Community power groups, press history and theory, and press law are also covered. Sessions consist of six hours of lecture and seven hours of television workshops and critiques.

ENGLISH FOR NONNATIVE SPEAKERS (7S04)

The course will consist of four formal classroom sessions, as well as various informal meetings with the instructor. The classroom sessions will deal with:

English sentence and paragraph structure

The punctuation of American English

The preparation and development of a formal English research paper

Documentation of a formal English research paper

These sessions are designed to concentrate specifically on those aspects of written English likely to cause difficulties for even the most advanced students. In conjunction with these sessions, each student will be encouraged to meet individually with the instructor for help with the various written assignments which are a part of the AFSC curriculum, in particular the Major Writing Exercise. Individual help may also be provided on aspects of English other than formal written discourse.

CREATIVE PROBLEM-SOLVING (7S05)

The course explains the nature of creative thinking and gives opportunities to practice its application in the problem-solving process. Students will form

small groups to pursue solutions to current Service-connected problems. They will receive brief lectures and numerous practical exercises that will teach them about creative thinking and how to achieve innovative results during problem-solving. The work in this elective complements the problem-solving involved in the preparation of Major Writing Exercises, joint planning problems, and staff action papers.

FOREIGN POLICY SEMINAR (7S06)

The seminar is designed to provide basic familiarity with the foreign-policy process in the U.S. Government, with emphasis on various approaches to foreign-policy formulation. Instruction will include lectures by the International Affairs Adviser, readings, seminar discussions, and oral presentations by selected students.

LAW FOR THE COMMANDER (7S08)

The seminar is designed to address current military law issues and problems faced by commanders and staff officers. This course will cover areas of jurisdiction, nonjudicial punishment, courts-martial, search and seizure, sentencing philosophy, legal ethics, post-trial review, command influence, and future trends in military justice. Administrative discharge systems of the Services will also be discussed. Particular emphasis will be placed on the role of the commander as convening authority. The international law aspects of armed conflict and relations with foreign governments and the legal ramifications of the joint planning procedure will be covered. Various administrative law topics will be presented, with emphasis on practical problems faced by the commander. Areas of interest include litigation against the commander, sex discrimination, environmental law problems, and First Amendment problems, such as demonstrations and literature distribution.

LEADERSHIP SYMPOSIUM (7S09)

The course will consist of faculty/student-led group discussions, individual presentations, analysis of selected readings, and an analysis of the film *Twelve O'Clock High*. Considerable background reading will be expected of students.

PERSUASIVE SPEAKING (7S10)

This course is conducted in twelve two-hour periods. Instruction is adapted from the Toastmasters International Leadership Series. The students will be required to present both prepared and impromptu speeches. The course coordinator is a member of the AFSC Toastmasters Club.

RAPID READING COURSE (7S11)

The course, consisting of six hours of instructional contact time, is designed to increase the students' reading rates through discussion of rapid reading methods and analysis of major reading problems. The course is not a speedreading course. It strives to establish an efficient reading rate, combining speed of reading, comprehension, and flexibility to make reading an effective tool for learning and enjoyment.

INTRODUCTION TO COMPUTERS (7S13)

The course covers computer capabilities, limitations, and applications. Early lectures on the basics of computer hardware and software provide a common reference point for later programming instruction. The student learns to develop problem-solving algorithms and a flowchart outlining the process used by a computer to solve the algorithm. The student is next introduced to the BASIC programming language and is required to write problem-solving and utility programs in that language. The student is provided hands-on experience with a remote time-sharing computer terminal for writing and running the programs in BASIC.

USING THE COMPUTER AS AN AID TO DECISIONMAKING (7S14)

The course covers capabilities, limitations, and applications, including key concepts and planning factors for understanding existing computer systems. Early lectures are on the basics of computer hardware and software. Later lectures stress the life cycle of a computer system, how to improve the system, how to manage it, and how to replace it with a new system. Students gain experience with the local time-sharing system, using BASIC as a programming language. BASIC and other higher-level programming languages are introduced in the course, but students are not expected to be able to program computers. The final portion of the course introduces students to some quantitative techniques and provides an opportunity to analyze and solve some simple problems with computer applications.

MILITARY HISTORY SEMINAR (7S15)

The American Revolution began a long history of military alliances and coalition warfare for the United States, and virtually all major conflicts involving American armed forces since the Spanish-American War have involved alliances. Under current world conditions, it is highly probable that future conflicts will continue this trend.

CIVILIAN PERSONNEL MANAGEMENT (7S16)

This seminar is designed to provide DOD managers with a working knowledge of the practical application of and trends in managing civilian personnel and equal employment programs. The course will consist of lectures and discussions led by local senior civilian and military managers covering selected topic areas.

AREA STUDIES SEMINAR (7S17)

Four geographic areas will be examined to familiarize the student with current regional political and military issues: Asia-Pacific, Middle East/South Asia, Latin America, and Africa. A student will select either Track I (Asia-Pacific and Middle East/South Asia) or Track II (Latin America and Africa), depending on individual preference. Each student will be required to give one 20-to-30-minute oral presentation and complete the required readings. Approximately ten hours of class time will be devoted to student preparation outside of class and twelve hours in class (two hours per session) to seminar discussion. Tracks I and II will run concurrently and meet on the same day. This elective is primarily for the student who is not familiar with one of the geopolitical regions and wants to learn more about current regional security issues. Regional experts, however, such as foreign

specialists, attaches, and former embassy personnel, are also encouraged to sign up, since their experience can contribute significantly to the seminar discussions and the learning process. This course will be particularly valuable to students anticipating assignment to joint/combined staff or overseas missions.

FAMILY LIFE SEMINAR (**7S21**)

This elective will be organized into lectures, discussions, and student presentations in order to provide insight into the resources available to strengthen the family units. For maximum benefit, it is preferable that both husband and wife attend and participate. The course covers approximately 24 hours of classroom time. A number of books, pamphlets, and articles will be suggested as supplemental reading.

LANGUAGE HEADSTART (**7S07**)

The course requires from 30 to 100 hours to complete. It utilizes nine printed modules with corresponding cassette tapes, glossary, and guides. It is completely self-instructional and will require study outside of scheduled activities.

FINANCIAL MANAGEMENT SEMINAR (**7S18**)

The course is designed to assist military personnel and their families in understanding the need for adequate financial planning and to introduce them to various financial planning techniques. This will be achieved through a series of three two-hour voluntary lecture/discussion seminars. The seminars will be held at night and presented by a local Certified Public Accountant. The themes of the seminars are income tax planning, investment planning, and estate planning.

HEALTH PROGRAM (**7S19**)

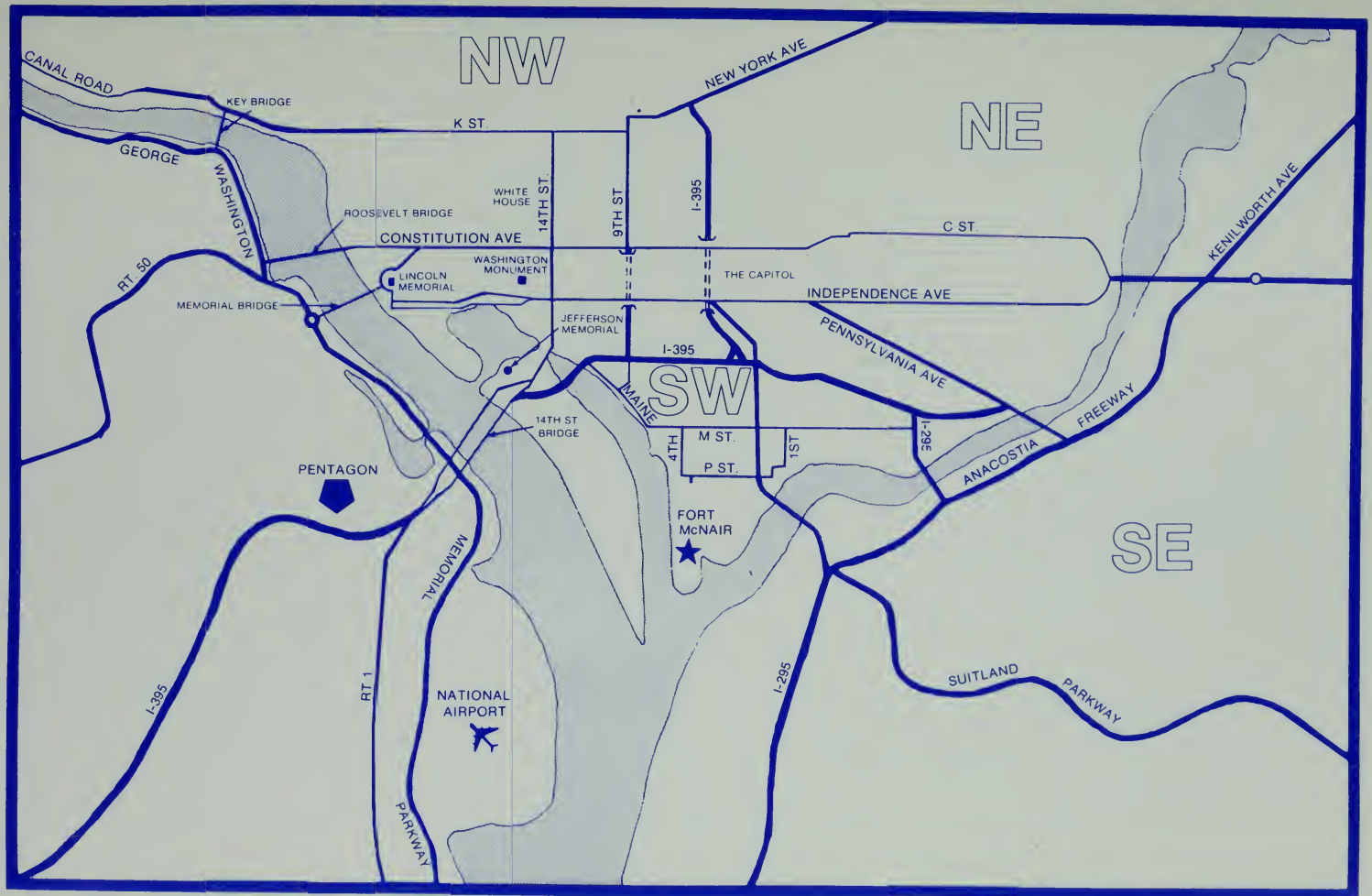
The first phase of the program, the measurement phase, will be used to determine the individual's degree of physical fitness, lung capacity, percent of body fat, ability to deal with stress, and health risk factors. The second phase, the prescription phase, will be used to prescribe an exercise program which is tailored to the individual level of fitness and to feed back the results of the health tests to the participants. The third phase, the testing phase, will be used to administer the Service physical fitness test.

CPR TRAINING (**7S20**)

The course requires four hours to complete. It includes the Red Cross First Aid module "CPR: Race for Life," demonstrations of CPR techniques by a qualified instructor, and individual practical application on CPR manikins.

CALENDAR OF EVENTS
ACADEMIC YEAR 1983-1984

8 August	Beginning of academic year: Class of 1984 (Industrial College of the Armed Forces and National War College)
15 August	Beginning of academic program: Class 74 (Armed Forces Staff College)
7-8 October	National Security Affairs Conference
28 October	Meeting of NDU Board of Visitors
1-2 December	ICAF Mobilization Conference
22 December to 3 January	Holiday recess for students (AFSC)
22 December to 4 January	Holiday recess for students (ICAF and NWC)
20 January	Graduation, Class 74 (AFSC)
6 February	Beginning of academic program: Class 75 (AFSC)
5 June	Graduation (NWC)
6 June	Graduation (ICAF)
18-29 June	Proud Prophet exercise 84
29 June	Graduation, Class 75 (AFSC)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